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THE CURE OF STRICTURE SIMPLIFIED.

By WM. H. DUKEMAN, M.D., Los Angeles, Cal.

Simple organic stricture of the urethra is frequently the result of a long standing or neglected gonorrhea, and is caused by an inflammatory deposit, either upon, within or beneath the urethral mucous membrane. The inflammatory deposit gradually contracts and thereby produces a narrowing of the passage. If the patient does not have the proper immediate treatment the passage will continue to grow smaller until it may finally become completely obstructed, and the patient is then unable to urinate. A man who has had more than one attack of gonorrhea is pretty certain to have a growing stricture, a chronic gleet being nothing more than a symptom of a developing stricture.

Happily all strictures do not become impermeable. Strictures are either of large or small calibre, and the line of treatment to be adopted should be based on the length of time the stricture has existed, and the nature of the cicatricial tissue, no one method being adapted to all cases. Some strictures grow very rapidly, others exist for years before giving any particular trouble. Strictures of recent growth, while the inflammatory deposit is yet soft and yielding, are best treated by dilatation. But those of long standing, where the inflammatory deposit is old and of a cicatricial character, no matter whether of large or small calibre, should be treated at once by a less painful and a more reasonable method. In strictures of a year's growth or more, which are invariably of a cicatricial structure, I never employ dilatation. This method is cruel and unreasonable, a torture to the patient, and in time he is obliged to resort to some other more successful and efficient treatment.

The method that I employ in these cases is a simplified internal urethrotomy. I examine the patient thoroughly and ascertain the normal calibre of the urethra by Otis' comparative measurements. If the meatus is abnormally small it must at once be enlarged, as many cases cannot be treated successfully without this procedure, as the following case illustrates:

T. C——, aged 31 years, of nervous temperament, consulted me for a slight chronic discharge from the urethra. About two years ago he

had a severe attack of gonorrhea and in a short time supposed he had recovered. He had occasionally felt an irritation at certain parts of the passage, and for the last few months had noticed thread-like deposits in his urine. On examination the meatus was found to be very small, only admitting a No. 16 French bougie. He had been treated by a physician who had passed the same sized instrument twice a week for about three months, but no improvement was noted. Comparative measurements gave the calibre of the urethra as 32 French. I at once incised the meatus and passed a No. 32 straight sound easily for a distance of $2\frac{1}{2}$ inches, where it became arrested. By using smaller bulbous sounds, a No. 15 passed the obstruction. This stricture was divided with an Otis' urethrotome to the normal size, and the sound passed to a distance of $3\frac{1}{2}$ inches, where it was again arrested. This stricture was divided in the same manner. The operation was in a short time followed by recovery. These strictures would not have been discovered, and the patient could not have been cured, without incising the meatus. If this had been done when he had the attack of gonorrhea I feel confident the stricture would not have followed; for such a small meatus must necessarily keep pent up, pus that could otherwise escape. The steps of the operation are as follows:

For a few days beforehand, I have the patient wash out the urethra thoroughly with a weak antiseptic solution. If the meatus is abnormally small, I apply cocaine and then divide it to the normal, which is determined by comparative measurements. The urethra is then carefully examined for strictures, and their location and calibre noted, as in the foregoing case. Having waited two or three days for the meatus to heal, under cocaine—or, where this disagrees, ether being administered—I divide the stricture or strictures with a dilating urethrotome, Otis' or Rogers', and immediately thoroughly irrigate the urethra with a cold antiseptic solution; put the patient to bed for 24 hours, and keep him under the influence of quinine, and use cold applications locally for about 12 hours. In all my cases within the past five years I have yet to see a patient with urethral fever, or to be compelled to confine him to bed longer than two days. Some patients, where the operation was very slight, immediately went about their business. By the use of cocaine as an anesthetic the patient can watch the operation and oftentimes assist, as he experiences no pain whatever. By the thorough irrigation of the urethra, with the use of cold applications, and keeping the patient perfectly quiet, I have never met with severe hemorrhage; and I no longer expect it, unless an abnormally located artery should be divided.

I do not pass sounds until after the first week, and then a few times only at intervals of three or four days or a week. If the stricture is thoroughly divided the passing of sounds every day, or every other

day, is uncalled for and positively harmful. It interferes with nature's reparative process in the freshly cut wound by causing irritation and setting up an inflammatory process which deposits a contractile lymph, producing that which it was the object to relieve and remove. The frequent passing of sounds, especially curved sounds, is apt to keep up an already existing irritability of the bladder. As a rule, I use straight sounds, slightly conical at the distal end, for one inch. Curved sounds I have discarded long ago. They do harm in many cases, and I cannot see why they should be employed in treating a stricture of the penile portion of the urethra. By this modified treatment I do not torture my patient with the painful passage of sounds over a raw surface, causing a fresh inflammatory deposit. The stricture is divided, the wound heals kindly, and I find that the proper sound will pass as easily at the end of a week as on the day of the operation. The time taken to cure the patient is very materially lessened, and instead of three, six, or twelve months, it can be accomplished in as many weeks.

Cor. Spring and First streets.

CLINICAL NOTES ON A CASE OF PERIODICAL EXFOLIATING DERMATITIS.

By DUDLEY TAIT, B. S., M. D., Surgeon to the French Hospital, San Francisco, Cal.

Read before the California Academy of Medicine.

If I take the liberty of presenting to you some specimens from a well defined cutaneous affection, it is not with any claim to originality. In view of its comparative rarity and striking features I hope to elicit a few remarks from the various specialists present.

The history of the case is as follows: L. G.—, aged 38, a miner by occupation, no hereditary antecedents, no eruptive fevers in the family. In the fall of 1887, while working in the mills, was affected with acute mercurial intoxication, followed by what was at first called an eruptive fever. The disease lasting over nine weeks, and being followed by excessive desquamation of the entire cuticle, the attending physician abandoned the diagnosis of scarlatina and suggested that of metallic poisoning.

Patient recovered entirely and enjoyed excellent health for ten months, when he again developed similar symptoms, the accompanying desquamation being even more marked than during the previous attack; large epithelial masses corresponding to the feet and hands were shed and the nails destroyed. . These attacks repeated themselves with great regularity and similarity every year during the fall, and were always followed by a reduction in weight, varying from 20 to 30 pounds. As the patient is of the average intellectual capacity, and has observed and

studied attentively the previous attacks, his description may be considered comparatively accurate. His statements are briefly as follows:

Prior to admission to the hospital, there was intense cephalalgia, nausea, general malaise and hyperthermia. This clinical syndrome lasted for three days, and was immediately followed by a well defined rash, beginning on the face. During this period of five days duration patient complained constantly of itching, with nocturnal exacerbations. A sensation of abnormal heat and weight was experienced in the hands and feet. He compared this sensation to wearing gloves or rubber boots. The rash disappeared about the fifth day and ushered in a period of desquamation involving the entire cuticle, but respecting the nails.

It was during this stage that the patient entered my ward at the French Hospital. Desquamation was then extreme, the epidermis peeling everywhere in large flakes. The conjunctivæ were well injected, the fauces red, the tongue somewhat denuded. No other catarrhal symptoms. Temperature, 99° F.; pulse, 70; respiration, 18; urine, 1200 gm. *per diem*; sp. gr., 1017; urea, 26 gm. *per diem*. No albumin, sugar, or abnormal coloring material. No casts. No venereal manifestations. Digestive functions apparently normal. Desquamation increased rapidly in intensity, and finally ceased at the end of the sixth week, after the present specimens had fallen off. Patient lost 24 pounds during this attack.

In the last volume of "International Clinics," Dr. William Blanc, of New Orleans, contributes an article on this disease under the title: "Erythema Exfoliativum Recurrens." Several interesting cases are quoted and the bibliography carefully scanned. The specimens I have the pleasure of showing you correspond exactly to the photographic plates accompanying Dr. Blanc's article. In choosing a name for the disease Dr. Blanc gives the preference to "erythema exfoliativum recurrens," but this appellation does not correspond to the truth, pathologically speaking, for the skin is not only hyperemic but inflamed. The terms employed by dermatologists differ greatly, the aim of most all being to recall the various clinical characters of the affection. Féréol and Besnier call it "erytheme desquamatif scarlatiniforme récidivant." Buckley refers to it as periodical exfoliating dermatitis, an excellent term both clinically and pathologically. Leloir and Vidal speak of it as recurring exfoliating dermatitis. Quinquand, impressed with the malignant character of several cases, proposed the name acute malignant dermatitis. Brocq considers it analogous to pityriasis rubra, while Fagge calls it acute periodical eczema.

The etiology of this morbid entity is still an hypothesis; its infectious nature has been discussed, and a few young French dermatologists have compared it to recurring erysipelas, in which Fehleisen's coccus is supposed to be constantly present on the cuticle. Others have considered

it as recurring scarlatina; this idea is hardly tenable in presence of the topographical evolution of the rash, the non-contagiousness, and the periodicity of exfoliating dermatitis. Dr. Blanc, in accord with Perrin's recent researches, comes to the conclusion that the exciting cause of the eruption is to be found in gonorrheal urethritis. It thus becomes an angioneurosis, being due to the "reflex action of the vasomotor system responding to irritation of the genito-urinary apparatus."

326 Geary street.

A CASE OF POISONING FROM ILLUMINATING GAS—DEATH THIRTY-TWO HOURS AFTER INHALATION.

By C. E. FOWLER, M. D., Sacramento, Cal.

Read before the Sacramento Society for Medical Improvement.

At 7 P. M. on January 25, 1892. S. W——, a traveler, aged about 30 years, applied at the Western Hotel in this city for lodging, and was assigned to a room on the third floor. The room was rather small, and was lighted by a window which opened out to an area, and by the usual transom over the door. At 2 o'clock the following morning a fellow-lodger heard him making unusual noises, as if in pain and distress. He arose, dressed himself and went to the door of the room from which the sounds had proceeded and was on the point of rapping upon the door, when he heard the inmate making a noise as if using the chamber, and concluding he was one of those "noisy" sleepers occasionally encountered, returned to his own quarters. Shortly after William Land, the proprietor, went into the hallway and extinguished the light, but although on the alert for such things, at that hour, did not notice any smell of escaping gas.

At 7 A. M., twelve hours after the guest had retired, the bellboy, according to directions left by the lodger, rapped on the door, but receiving no response, aid was summoned and the door broken in. The room was full of escaping gas, the burner being turned on full, and the window and transom tightly shut. The inmate was deeply asphyxiated, and respiration had almost ceased. The proprietor, who is somewhat of an adept in such cases, at once commenced artificial respiration with such good effect that upon my arrival, shortly after, I found the patient breathing stertorously and the pulse strong, but rapid. Hypodermic injections of brandy and atropine were administered, and the patient removed to an open window, where access to pure air was obtained. An hour later I found him still breathing heavily, and with symptoms of heart failure that promised a bad result. At the suggestion of Dr. W. R. Cluness, who saw the patient with me, hypodermic injections of strychnine were given. There being frequent signs of respiratory failure artificial respiration was imperative, and was kept up at frequent in-

tervals for several hours. At the expiration of this time the respiration had improved and the pulse was 130 per minute.

During the afternoon the symptoms improved slightly—the pulse slowed to 106 and the respiration, though stertorous, was regular. The patient broke out into a copious perspiration, which lasted for a couple of hours, and he evinced pain when the syringe was used. The urine was drawn and was normal in color. No improvement in his condition was to be noticed the next morning. On the contrary, the pulse was 120 and the physical prostration greater. Brandy and milk punch, and occasionally hot beef tea, was given, the patient swallowing the liquid when it was placed in his mouth. The urine was drawn off in considerable quantity, and perspiration again occurred during the day. There was almost total unconsciousness, although there appeared to be an effort to respond when his name was loudly spoken, and the head would be turned toward any unusual noise that occurred. The eye remained normal, and the conjunctiva was sensitive up to within a few hours of death, which took place about 3 A. M. Wednesday morning—32 hours after his removal from the room.

Autopsy: Assisted by Dr. Shoemaker, of the Railroad Hospital, an autopsy was performed, which showed the entire substance and surface of the brain to be highly congested, giving the organ a cherry-red appearance. The arteries were filled with blood, causing the coloring, and the veins were engorged and very conspicuous, giving the appearance of black stripes on a red base. Death was probably due to a poisoning of the cerebral centres from carbonic oxide. In the absence of an apparatus for producing oxygen this agent was not employed. It would be too much to say that a case of this character could have been saved by the use of oxygen, yet the prognosis would certainly have been more favorable. The main point of interest in the case is the length of time which elapsed after the inhalation of the poison before death ensued.

200½ K street.

LAPAROTOMY FOR PURULENT PERITONITIS FOLLOWING GUNSHOT WOUND—RECOVERY.

By W. H. PATTERSON, M. D., Reno, Nev.

The following has been to me a very interesting and satisfactory case, and I report it, hoping that others may find in it encouragement to give the only chance of life left to a patient under similar circumstances:

Patrick H—, aged 26 years, was shot on the 27th of December, 1891. At the moment, he was leaning forward in a struggle with his opponent, a larger man. The pistol—a feeble-shooting American bulldog of large calibre—was fired from and through the pocket of a light overcoat, the hand in which it was held being raised at the instant of discharge. The bullet entered the abdominal cavity 6 inches below the left

nipple and $1\frac{1}{2}$ inches inside a vertical line let fall from that point. It grazed the free margin of the costal cartilage and ranged backward and slightly downward. There was no external hemorrhage.

From his own statements I gather that during the twenty days intervening between the shooting and my taking charge of the case, he was almost continuously under the influence of opiates. At times he was violently delirious from fever and pain. There was slight paresis of the left leg. At one time he was greatly "bloated," and suffered for more than 24 hours from distressing hiccough. Copious rectal injections, frequently administered, repeated, presumably to secure evacuation of the gas *per rectum*, proved unavailing. He had vomited repeatedly, but there was abundant evidence that the continuity of the stomach and bowels was unbroken. The bullet-hole had recently closed, and when the distension became so great as to reopen it the gas found vent and the patient immediate relief. I was informed that his urine contained pus, but this statement is unverified. On assuming charge of the case, I found him much emaciated; pulse rapid and feeble; temperature 102.3° F.; hectic flush on cheeks; very profuse perspiration; frequent cough, from which he refrained, when possible, because of the pain it occasioned; expectoration copious, glairy, greenish-yellow mucous; urine rather scanty, dark red and heavily loaded; bowels moving with sufficient frequency; appetite fairly good; digestion being wonderfully well performed, considering the foul sea of pus in which the whole intestinal canal was subsequently found to be floating. The wound was partly open. The abdomen was distended with what was evidently an accumulation of pus, some of which escaped through the bullet hole on turning him on either side.

On January 16, 1890 (20 days after the receipt of the injury), with the assistance of Dr. Bergstein, I opened the abdominal cavity, by an incision five inches long, beginning at the free margin of the lower rib, five and a half inches from the medium line of the back, and extending obliquely toward the anterior superior spinous process of the crest of the ilium. This point was selected, as I was not then absolutely certain that the general peritoneal cavity was involved. From the direction of the external wound, the bullet ranging backwards, it seemed possible that an abscess forming between the abdominal muscles had communicated with the cavity of the abdomen, but still remained circumscribed. The tissues cut through looked as though they had been bruised by pounding with a club. The abdominal cavity was full of pus, the amount evacuated being safely estimated at a gallon and a half. To say it was fetid, does not express it. The stench was intolerable to the other occupants of the hotel in which he was. The bullet was found lying loose at the lowest point of the abdomen as he lay. The abdominal cavity was repeatedly and thoroughly flushed with warm water. Hem-

orrhage from some internal vessel giving way on withdrawal of the support afforded by the accumulated pus threatened to prove fatal. By the use of water too hot to hold the hand in, the bleeding was stopped and the failing heart rallied. When the returning water flowed perfectly clear a solution of corrosive sublimate, 1 : 3,000, was used. A rubber drainage tube was inserted, and the wound closed by silk sutures, including the whole thickness of the abdominal wall and the peritoneum. Iodoform was dusted liberally on the surface, and an abundant dressing of absorbent cotton, covered with oiled silk, applied, no bandage being used. One-quarter of a grain of morphine was injected hypodermically, and a tumbler full of milk punch administered.

The patient rallied well from the operation and made an uninterrupted recovery. To-day, one month after the operation, he seems sound and well. At no time since the operation has his temperature been higher than 100° F., and even that was reached on only one occasion, when the bowels had not been moved for three days. Usually it was normal. He was liberally fed with milk and beef tea for the first three days, after which were gradually added fresh oysters, milk toast, and later more substantial food. Stimulants were, at first, given freely, and then gradually discontinued. Opiates were very sparingly employed. Saline laxatives were used from the first, whenever the bowels refused to move spontaneously. The drainage tube was finally removed, on cessation of discharge, on the twentieth day.

THE SEQUELÆ OF INFLUENZA.

By G. L. SIMMONS, JR., M. D., Sacramento, Cal.

Read before the Sacramento Society for Medical Improvement.

Every practitioner in his dealings with the victims of influenza has noted the occurrence of various sequelæ which have, perhaps, been more frequent in this than in preceding epidemics. From the capricious nature of the disease, it is almost impossible to map out a regular course and to predict what sequelæ will arise.

"La grippe," as seen in Sacramento, usually commences with a chilliness, lasting from minutes to days, followed by high fever, sore throat, cough, with various degrees of catarrh of the bronchi, aching in the back and bones, skin hot and dry. Gradually these symptoms abate and the patient is left prostrated, without appetite, and usually with an irritative cough. The depressed state of the nervous system seems to explain the existence of the sequelæ. The following cases illustrate some of the types that are met with :

Case I.—J. A. K——, aged 35 years, weight 230 pounds, florid complexion, full habit. Dec. 17, 1891, was taken with the ordinary symptoms of influenza, and seemingly made a good recovery after four days

in bed. He was able to get about, but felt too weak to resume work. Two days afterward a severe headache came on, lasting through the night and until I saw him the next day. He had never before had headaches. He was rolling on the floor with pain in the head, which was equilateral and continuous. The thermometer in the mouth registered 98.7° F.; pulse, 100, and feeble; skin, cold and clammy. A hypodermic injection of $\frac{1}{4}$ gr. morphine gave him great relief, and restored the temperature and pulse to normal, but in an hour's time he was again in bad condition. The patient was kept under the influence of morphine, $\frac{1}{4}$ gr. every 3 hours, night and day, until a few days ago. Since January 13 he has taken no medicine and appears to be, in all respects, perfectly convalescent. The headaches were believed to be due to depression of the sympathetic system, as a sequel of the influenza.

Case II.—Boy; aged, 4 years; previously healthy; when first seen his mother gave a history of "la grippe," from which he seemed to have made a slow recovery. Two weeks after I found him in bed unable to move his legs. He passed water regularly, but the prepuce was unnaturally long. The next day he could scarcely be touched, the whole body was so extremely sore. Urination then became difficult, and on the third day of my attendance, he passed no water for eighteen hours. Owing to the condition of the prepuce, an operation was deemed necessary, and the foreskin was slit up and the water drawn. It was necessary to use a catheter twice afterward. The paralysis of the legs slowly improved. The child now, two weeks afterward, is still somewhat weak on its legs, but is otherwise in good condition. The only medicinal treatment was the administration of syrup hematic.

Case III.—Mrs. D——, aged 25 years, mother of two children, the youngest, 18 months; never had any leucorrhœal discharge until one week after "la grippe" had prostrated her. There was then profuse discharge, never greenish or bloody, but no burning on urination. A mild antiseptic injection of boric acid, with the internal administration of a strychnine tonic, completely cured her in a few days.

Case IV.—Mrs. K——; always previously healthy; in convalescing from "la grippe" was suddenly attacked with severe pain in the right ear. After hot local applications and laudanum in the ear, the pain subsided and a discharge of pus in the posterior nares followed. The drum of the ear remains greatly congested and there is still some sensitiveness in the region of the external auditory meatus.

Case V.—G. G——; aged, 3 years; one week convalescent from influenza; was suddenly attacked by stiffness in the sterno-cleido mastoid muscles, so much so that the head was fixed, apparently, at right angles to the spine; temperature, 103° F.; pulse, 120. No stiffness in the muscles of the back, abdomen, legs or arms. Under bromide of potassium and chloral, the stiffness gradually disappeared, the fever ceasing on the second day. There was no irregularity in the pupils, no photophobia, grinding of the teeth, or vomiting. Excepting the fever for the first two days, there were no abnormal symptoms other than the contraction of the sterno-cleido mastoid muscles, both being equally affected.

Other cases may be cited of a similar nature, besides the more common sequelæ of bronchitis, pneumonia, and cardiac irregularities. The

effect of influenza is evidently to lower the tone of the nervous system, and the sequelæ embrace all variety of complaints. I have here recorded cases of congestive headache, of paralysis of the bladder and lower extremities, of leucorrhea, of abscess of the posterior nares, and of muscular contraction, and it will be of interest to hear of other affections that may be classed as sequelæ of "la grippe."

212 J street.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M. D., Sacramento, Cal., and

HENRY GIBBONS, JR., M.D., Professor of Obstetrics and Diseases of Women, Cooper Medical College, San Francisco, Cal.

Puerperal Tetanus.—The indications in the treatment of puerperal tetanus are threefold: (1) Local treatment for the elimination and destruction of pathogenic agents. (2) Modification of the blood which is affected by the toxine. (3) Diminution of the excito-motor power of the nervous centres. We cannot hope much from local antiseptic treatment after the appearance of the first symptoms, but this malady is unusually severe when complicated by septicemia, and in combatting the latter we may perhaps diminish the intensity of the principal affection. The greatest caution is necessary in order to avoid violent dilatation of the cervix, which might induce reflex action, and thus increase the muscular spasm. Attempts hitherto made to modify the condition of the blood have been without result, but it is known that immunity from tetanus may be secured in rabbits by injecting into the blood tetanic cultures filtered and raised to a temperature of 60° C., according to VAILLARD'S method, or by introducing terchloride of iodine under the skin, after the example of BEHRING and KITASATO; and it is claimed by these last observers that tetanus may be cured by the injection of blood serum obtained from animals rendered insusceptible to this disease. The single attempt made to verify this theory by BAGINSKY resulted unfavorably, and further experiments are rendered difficult by the large quantity of blood serum required. Opium and morphine, belladonna and atropine, chloral and chloroform, bromide of potassium, curara, nitrite of amyl, tobacco, veratrum viride, etc., have all been used in the hope of diminishing contraction and lessening the excito-motor power of the nervous centres. The rare cures reported have been achieved by varied medication, leeches, musk, valerian, warm baths, injections of turpentine, and chloral, but chloroform by inhalation has seemed most frequently beneficial, though the greatest care and skill are necessary in its administration, as the danger of asphyxia in tetanus is constant, and may be increased by chloroform itself. The inhalations must be continued for several hours in order to produce profound and prolonged narcosis. Chloral is next to chloroform in value, and one grain every hour, 10, 12, 14 grains a day may be given by the mouth if possible, or, if the trismus be too great, it may be given in 4-grain doses by enema. If the injections are not retained we may have recourse to morphine, which acts promptly, lessens pain, and induces sleep. Prolonged warm baths, followed by wet compresses, have a sedative action, and favor elimination of the poison by the skin; but their use must be regulated by the condition of the

patient, and they must be instantly given up if they seem to increase contraction. The hygienic surroundings of the patient must be carefully watched, and she must be preserved from physical and mental agitation. The body must be kept at a mild and uniform temperature, and intestinal accumulations removed by enema, though all efforts to rise must be strictly forbidden. Thirst should be assuaged, and the diet made as nourishing as possible, without attempting to open the jaws by force. Prolonged confinement to bed is advisable during convalescence, in order to avoid relapse.—*Gazette des Hôpitaux*, December 3, 1891.

Puerperal Inversion of the Uterus.—Puerperal inversion of the uterus may be called immediate when it occurs at the moment of delivery, secondary when it takes place afterward, and chronic when it continues longer than the puerperal condition in which it originated. Statistics show that immediate inversion, though a very rare affection, is more frequent in primiparæ than in multiparæ. It is produced by two pathogenic agents: inertia of the uterus, and pressure from above downward. Adherent placenta is a frequent complication. As soon as the inversion takes place the placenta must be removed, if it has not already been taken away, and efforts made to reduce the tumor. The body of the uterus must be pushed back in such a way that the parts return in a reverse order to that in which they descended, the highest parts being first replaced. The operation may be compared to taxis, although it essentially differs from taxis, in that the tumor is usually so large that the pedicle cannot be held by one hand, while the other exerts pressure from below upward upon the uterine mass. Place the hand upon the abdominal wall in such a manner as to fix the infundibulum formed by the inverted uterus, and seize the tumor with the other hand, pressing the fundus with the palm and the sides of the uterus with the fingers. By uniform and energetic pressure from below upward the resistant mass may be pushed back through the cervical ring, while the tumor is kept in place by the hand upon the abdominal wall. Instruments should not be used on account of the danger of perforation. If the operation is unsuccessful, we are compelled to choose between amputating the tumor and allowing things to remain as they are, in the hope that the inversion may become chronic. Prognosis in these cases is so grave, and the condition of the patient so unfavorable, that great boldness is required to undertake a radical operation; nevertheless it has been attempted, and followed in one-tenth of the cases by recovery. It is sometimes rendered imperative by gangrene of the inverted mass. Reports show that there is great danger hemorrhage may follow section of the uterine and utero-ovarian arteries, and a ligature should, therefore, be placed around a part or the whole of the tumor.—*Journal de Médecine*, January 10, 1892.

Treatment of Infantile Diarrhea.—The following method of treating infantile diarrhea was first used in Germany, but has since been adopted in Paris by PROF. GRANCHER and DRS. HUTINEL and SÉVESTRE, with encouraging results: It consists in washing out the stomach, and in the consecutive use of calomel and a diet of albumin water and whisky. Washing the stomach may be easily accomplished by placing a cork between the infant's teeth or gums, and then passing into the stomach a soft rubber catheter long enough to form a siphon, and attached to a funnel. Slowly pour into the funnel one or two glasses of boiled water, which must be instantly withdrawn. If the water returns foul, or if the contents of the stomach are fetid, the operation should be repeated two or three times, and a small dose of calomel (1 to 3 decigrammes) given immediately after, followed by a second and possibly a third, at intervals of an hour.

One washing is often sufficient, but two and even three are sometimes required. The albumin water and whisky is given by spoonfuls at intervals of from five to twenty minutes, according to the child's thirst and the dryness of its mouth. The infant may be kept warm by enveloping the feet and stomach in cotton, and if the evacuations are insufficient, the bowels should be emptied by an enema of boiled water. A bath of weak mustard water, at a temperature of 32° C., is useful when fever is present, and a poultice on the stomach relieves distension. Food should not be taken until after the disappearance of all unfavorable symptoms, and should consist of asses' milk, bouillon, free from fat, and small quantities of sterilized milk, or, if these do not agree with the child, of balls of raw meat administered according to Trousseau's method. If, after beginning to take food, the child has green passages without graver symptoms, a little lactic acid, or 4 or 5 drops of dilute hydrochloric acid, may be given with advantage.—*Médecine Moderne*, December 3, 1891.

Antipyrin in Whooping Cough.—The use of antipyrin in whooping cough was first recommended by DEMUTH, WINDEL-SCHMITT and SONNEBERGER, and their favorable reports have received confirmation from every side, including France and England, and quite recently from VON CENSER and P. RU. About 30 cases have been recently treated with antipyrin at the out-patient department of the Basle Children's Hospital, as many decigrammes as the child was years of age (or 15 grains for a child 10 years of age) being given morning and evening. The beneficial effect of the remedy was established in four-fifths of the cases, was astonishingly marked in a few, and in none was it uncertain. The attacks diminished in violence and frequency, especially at night; vomiting was arrested, and the course of the disease decidedly shortened. Complications were rare. PROF. HAGENBUCH obtained similar good results from the administration of antipyrin in his private practice, repeatedly observing that the cough was prevented from reaching the more violent stages when this drug was administered sufficiently early. It would seem, therefore, that antipyrin is a valuable remedy for whooping cough, even if not a specific.—*Medical Press and Circular*, January 13, 1892.

Points Concerning the Vomiting of Pregnancy.—(1) The vomiting of pregnancy is due to a reflex irritation produced by a developing ovum acting upon an exalted nervous system. (2) It is not an affection of great gravity and need occasion no anxiety or alarm. (3) Active treatment is rarely demanded, as it is only a disturbance of a few weeks at most. (4) The severity of the gastric trouble is no indication of the character of the subsequent labor. (5) When the affection persists beyond the period of quickening, it is due to pathological causes, which must be discovered and treated accordingly.—*Times and Register*, January 23, 1892.

Diagnosis of Pregnancy in the Early Months.—The diagnosis of pregnancy in the early months rests upon no one sign, but upon the collective evidence of all the signs. The most reliable evidence of normal gestation in the first three months is to be found in the changes that take place in the uterine tumor. In the great majority of all cases of normal pregnancy the signs of the second month are sufficient to establish the diagnosis. In the absence of pelvic disease pregnancy may be positively predicated in every case of utero-gestation between the eighth and the twelfth week, often at an earlier period. A ruptured tubal pregnancy, with slight hemorrhage, may pass unrecognized, usually being followed by recovery. In ruptured tubal pregnancy, with free hemorrhage, the

clinical picture is unmistakable. While the diagnosis is more difficult in ectopic than in normal pregnancy, it is possible in a large percentage of cases.—*Brooklyn Medical Journal*, February, 1892.

The Cerebral Atrophies of Childhood.—From a review of the clinical types of cerebral atrophy in childhood, of the pathological conditions producing these types, and of the results of surgical treatment by craniectomy, the following conclusions may be drawn: (1) Hemiplegia, sensory defects and imbecility occurring with or without epilepsy in children, are chronic diseases, incurable by medical treatment. Any means which may be legitimately used to save the individual from a life of invalidism, and to take the burden of care from the family, is to be employed. (2) The pathological conditions producing these symptoms may be either gross defects and atrophies of the brain or an arrest of development in the cerebral cells, without any change apparent to the naked eye. (3) It is at present impossible to determine absolutely the pathological condition present in any given case without an exploratory operation. (4) Such operations are not without danger, but if caution is used in opening the dura, and if the operation is made as short as possible, the dangers are avoided. (5) When manifest atrophies are present the operation will produce no result. When the condition is one of arrested development of cerebral tissue, it may prove of service. When clots, cysts, or tumors are found and removed the chance of recovery is increased. When the skull is markedly microcephalic from early union of the sutures, the increased space given to the brain by the operation seems to stimulate its growth and development. (6) Epileptic attacks are often reduced in frequency and modified in character by craniectomy. When the opening of the skull remains covered only by the soft tissues, it appears to act as a safety-valve, allowing changes in the intracranial contents to occur without producing pressure on the brain. (7) While hemiplegia, aphasia, athetosis, and sensory defects have been relieved by the operation, it is as yet impossible to predict to what extent imbecility may be relieved. (8) Reports of cases should be made in full, and not within six months of the time of operation, as conclusions cannot be trustworthy unless reached by long observation.—*Medical Record*, January 23, 1892.

Diseases of the Fallopian Tubes and their Treatment.—DR. T. MORE MADDEN in a series of lectures upon this subject says the accurate differential diagnosis and successful or radical treatment of Fallopian tube diseases have only become generally obtainable within a recent period; and for that advance we are largely indebted to the teaching and practice of Mr. Lawson Tait and some other leaders of the modern school of abdominal surgery.

Treatment.—In the treatment of chronic salpingitis and the resulting pyo- or hydro-salpinx, it appears to be not infrequently lost sight of, that in these, as in all other cases, the gynecologist should set before him not only the removal of disease, but also the restoration of the functional and structural integrity of the affected organ, as far as these objects can possibly be combined and accomplished; and that only where the latter is impracticable, should he be content with the former. With this view several methods of dealing with these cases have been suggested: (1) Removal of the contents, whether purulent or serous, of the distended tube by aspiration, as recommended by Dr. Routh, and also by myself some years ago, the expediency and possibility of catheterization of the Fallopian tubes in certain exceptional instances being discussed and demonstrated. (2) By free incision *per vaginam*, and subsequent washing out of the

emptied tubes, as advocated by Dr. Sinclair. (3) Curetting the endometrium around the uterine ostium of the tube, and Emmet's operation. (4) Employment of electricity by the method of Apostoli. (5) By what may be termed conservative laparotomy—i. e., abdominal section with the view either of aspiration of the distended ducts, or, as advocated by Mr. Alban Doran in some instances, for the purpose of breaking down adhesions and "freeing the diseased appendages." (6) Resection of the tube by salpingotomy or Skutsche's operation. (7) And lastly, in this connection is massage as employed by Brandt in such cases. I shall only refer to those procedures of which I have proved the practical utility. This is not the case with salpingotomy, concerning which, as well as other "fancy operations" that may more safely be demonstrated on a lecturer's diagram than in a patient's body, I would reëcho Dr. Goodell's criticism—"The diseased parts cannot be handled in abdominal section without great risk. The tube is often tensely distended, and adhesions to neighboring structures are usually intimate. Hence the tube may carefully be ruptured, intestines torn, and circumscribed collections of pus diffused." As to massage, it can hardly be considered harmless in such cases as, according to Goodell, Brandt is credited with venturing to attempt the emptying of a distended tube into the uterus by "rolling it gently between the fingers of both hands," a manœuvre which, it is admitted, often causes "an escape of secretion into the peritoneal cavity, which readily gives rise to symptoms of peritonitis." In the rational treatment of pyo- and hydro-salpinx, there appears to be no reason to depart from the traditionally recognized first principles of surgery, by an indiscriminate resort, in the first instance at least, to such heroic operative measures as the complete extirpation of the uterine appendages. If the mammary gland, for example, becomes the seat of a purulent collection, or if, as Sir Spencer Wells suggests, the tunica vaginalis testis is the location of a hydrocele, would it not be more advisable to open the abscess, or to tap the hydrocele, than to amputate the breast, or to remove the affected testicle? And must we then necessarily adopt an entirely different course as a matter of general practice in dealing with analogous conditions in other no less important organs? Acting on these principles, therefore, for several years past, I have, in the first instance at least, treated a considerable number of cases of pyo- and hydro-salpinx by aspiration and other conservative measures. This treatment, even if not as certain in its radical curative results as salpingotomy, is certainly quite as successful in that class of cases to which its employment should be restricted, and at least contrasts favorably as far as facility of performance and safety from danger with the latter operation which in other cases or after its failure may become no less expedient. The patient should be anesthetized and placed in the ordinary left lateral position. The operator introduces the index and first fingers of his left hand through the sphincter ani upwards and forwards along the posterior uterine wall, the fundus being pressed down by the assistant's hand over the hypogastrium. In this way the tubes and ovaries can be readily palpated, and if there be any inflammatory or cystic enlargement of the former it may be distinctly recognized as a tortuous, elongated, or sausage-shaped or rounded fluctuating tumor, extending, as Dr. Wm. Duncan says, "from the side of the the uterus outwards to the broad ligament and backwards into Douglas's fossa." Having thus ascertained the position of the pyo- or hydro-salpinx, the next step is to carefully introduce *per vaginam* on the point of the right index finger a long fine needle affixed to the aspirator up to the roof of the posterior vaginal *cul-de-sac*, through which it is to be passed into the retro-

vaginal fossa, and thence guided by the operator's left index from the rectum up to the most prominent presenting part of the tubal swelling, into which it is plunged. The tap of the aspirator is then turned, so as to give exit to the contents of the dilated tube, the expulsion of which may be assisted by the steady pressure of the assistant's hand from above the hypogastrium down into the pelvic cavity, and continued until the tube is completely evacuated. After this the vagina should be rendered aseptic by insufflation with iodoform, no further local treatment being necessary beyond hot water irrigation, unless the tube should fill again, when the same procedure may be repeated until the oviduct has become reduced to its normal size.

Curetting Fundal Orifice of Tubes; Treatment by Electricity.—Apart from malignant and other degenerative changes, the most common immediate cause of cystic accumulations in cases of chronic salpingitis is mechanical obstruction of the uterine orifice of the oviduct, due either to chronic follicular endometritis, flexion, or, in some instances, supra-involution of the uterus. Under such circumstances the tubal obstruction is most likely to be relieved by dilatation, followed by curetting the diseased endometrium in the first instance, or by rectification of the flexion in the second, and by faradization in the last named cases. The faradic current has in these and in other forms of chronic salpingo-oöphoritis been successfully employed by Apostoli, who generally uses a current of tension applied in moderate doses and for only a few minutes at a time, for which he claims the most remarkable curative results in such cases. Dr. Milne Edwards does not believe that the galvanic current is suited to cases where there is definite organic change in the ovaries, but considers that faradism may possibly be of service.

Removal of Uterine Appendages.—In those graver and somewhat more exceptional cases than is generally supposed, in which, from the extent of Fallopian disease, the implication of adjoining structures, the urgency of the symptoms, or other causes, it becomes impossible to employ the methods already referred to, and more active surgical intervention is indicated, there only remains the complete removal of the uterine appendages. Nearly all the preliminary steps of this, which is known as "Tait's operation," being identical with those of ovariectomy, I shall merely allude to the points in which these operations may be contrasted. The first is the smaller size of the abdominal wound required. The incision should only be just sufficient to allow the introduction of the two first fingers of the operator's left hand, which should be passed down to the fundus uteri, by the position of which he will be readily guided to the contiguous tubes and to the ovaries. The often widely-distended oviduct must be most tenderly handled to avoid extravasation into the peritoneal cavity of a pyo- or hydro-salpinx, which may occasionally be prevented by aspiration of the diseased tube before any attempt to draw it out through the abdominal wound, when this is not rendered impossible by extensive inflammatory adhesions. Having drawn out, as far as can be safely done, the affected tube and ovary, so as to form a kind of pedicle from the broad ligament, a blunt-pointed needle carrying a double ligature of stout silk is to be passed through the centre of the latter, carefully avoiding injury to blood-vessels as far as possible. This ligature is next secured by an ordinary "reef knot," which I have found sufficiently reliable and easier to make than it would be for me to acquire the probably still better "Staffordshire knot." The ovary and oviduct are next to be separated by blunt scissors, curved on the flat, a little above the point of ligation, and then dropped back into the peritoneal cavity. If necessary, a similar procedure may then be

adopted with the remaining ovary and tube, after which the abdominal cavity may be washed out with warm water, the wound closed, and the case treated on the same general principles as an ordinary ovariectomy. This operation, under ordinary circumstances feasible enough to any surgeon, is occasionally one that might puzzle the most dexterous specialist to carry into effect. The difficulty of removing a Fallopian tube that may possibly be distended to the point of bursting, without rupturing the thin tensely-stretched walls of the purulent sac into the peritoneal cavity, is obvious. Where the ovaries and tubes are matted together, and to the ligaments, uterus and adjoining structures in one inextricable mass, that difficulty may be converted into an impossibility. The immediately successful results now obtained from the removal of the uterine appendages in the majority of cases, and the very small mortality consequent on its performance, in the hands of skilled specialists, has been proved beyond any possibility of question by the statistics of Mr. Tait, as well as by those of Dr. Bantock and other eminent surgeons. Of the ultimate curative results a less hopeful view is taken by some authorities whose opinions are no less entitled to consideration. Mr. Alban Doran observes: "As a rule, oöphorectomy for chronic disease of the appendages is followed by speedy convalescence. Unfortunately, a permanent cure is not so frequent. Mental symptoms occasionally follow double oöphorectomy. The cases where the stump suppurates are particularly unsatisfactory. Fistulous tracts open, close, and reöpen in the abdominal wound for months, discharging thin pus. Such cases find their way to the consulting rooms of others, or to other hospitals than the institution where the operation was performed. The operator hears no more of them, and he or the hospital registrar records them in perfect good faith as 'cures.' A larger minority suffer from a continuance of the pains which preceded the operation, probably on account of intestinal adhesions, or through irremovable inflammatory products which press on nerves. The ligatures certainly set up trouble in some cases." Similar views have been expressed by other writers. Dr. H. C. Coe observes: "There are not a few women now attending the various clinics in New York who have had their ovaries and tubes removed, and yet who complain of precisely the same pain as before; in fact, I can recall cases in which, although the menstrual disturbance is wanting, the pain is more severe than it was before." I, therefore, think, without questioning the necessity for these operations, or the success attending their performance in the hands of a few distinguished surgeons, the great body of medical practitioners who occasionally must meet and deal with cases of Fallopian tube disease, should be very slow to adopt operations, the success of which can only be assured by exceptional skill, and that even where the circumstances of the case preclude the possibility of transferring the responsibility to those possessing that capacity, they should, before attempting to imitate their practice, at least fairly and fully try less heroic, yet often successful methods of treatment.

SURGERY.

By T. W. HUNTINGTON, B. A., M. D., Surgeon Southern Pacific Company's Hospital, Sacramento, Cal.,

J. F. MORSE, M. D., Surgeon German Hospital, San Francisco, Cal., and

G. F. SHIELS, M. D., C. M., F. R. C. S. E., Surgeon Polyclinic, San Francisco, Cal.

Compound Depressed Fracture of the Skull.—DR. WALTER BENSEL reports the case of a patient aged 38 years, who was struck in the forehead with a heavy beer glass. Consciousness was lost for a few moments; he was then able to

walk unaided to a police station, where he was transferred in an ambulance to the hospital. On admission consciousness was perfect, pulse slow and full, pupils dilated, skin warm and dry and respiration normal. There was slight bleeding from the nose, but extensive subconjunctival hemorrhage on each side. A wound two inches long extended transversely across the middle of the forehead, at the bottom of which was a depressed fracture. Patient refused consent to an operation until forced to do so by pain caused from protruding eyeballs. Temperature 101.2° F., pulse 78. Wound enlarged, the depressed portion of the bone found completely detached and the meninges very extensively torn. Tremendous hemorrhage from the superior longitudinal sinus followed the removal of the bone. This was controlled by a Laugenbeck's artery clamp, one end of the catch being placed under the open end of the superior longitudinal sinus, beneath the edge of the opening in the skull, the middle of the catch resting on the edge of the opening, which formed the fulcrum of the lever; the other end of the catch which projected out of the wound was fastened firmly to the skin by two sutures. Deep lacerations were found in both the right and left frontal lobes. The wound was packed lightly with bichloride gauze (1:2000) and an antiseptic dressing applied. At the end of 48 hours the clamp was removed, no hemorrhage following. There was no rise of temperature, and the patient made an uninterrupted recovery.—*New York Medical Journal*, January 16, 1892.

Intracranial Hemorrhage.—DR. N. B. CARSON, in a paper upon this subject, says: Wiseman has collected 147 cases treated expectantly; out of this number 89.1 per cent. died, while, on the contrary, out of 110 cases treated actively only 32.7 per cent. died. Dr. Warren reports a case in which a diagnosis of clot was made. While preparing to operate, the patient began to move the paralyzed limb, and eventually made a complete recovery without an operation. In selecting cases for operation undue haste should be avoided; treatment should be with a view of controlling hemorrhage and causing absorption of the clot. Any evidence of increase in the symptoms should warrant an operation. Owing to a simple mechanical law, renewed bleeding is apt to take place much more readily in the horizontal than in the erect position. The patient should be propped up by pillows, and kept in that position as long as possible. This simple precautionary measure is often neglected by physicians and laymen.—*American Journal of Medical Sciences*, February, 1892.

Excision of the Knee Joint.—In a report of 10 consecutive cases of excision of the knee joint, DR. JOSEPH D. BRYANT makes the following deductions: (1) A constant and close scrutiny should be made of the functions of the kidneys in all cases of chronic disease of large joints or of bones, with the view of detecting the first manifestations of the consequent complications of the kidneys in these diseases. (2) The advisability of operation in severe cases, before kidney disease may be manifest; provided all other well-recognized measures of treatment may have been given a reasonable trial without substantial benefit. (3) The advisability of operation at once, when kidney disease is found to exist as a presumptive consequent complication, to limit if possible the further involvement of the kidneys from these causes. (4) The use of chloroform instead of ether in operations with kidney involvement. (5) A careful scrutiny of all the nooks and crevices of the joint, and of the surrounding tissues, that all diseased products may be removed to prevent the infection of the fresh surfaces. (6) The operation is admissible: (a) When remote or unsound ankylosis appears to be the only result that can be reasonably expected. (b) When mechanical and reme-

dial measures, faithfully applied, have failed to afford any permanent relief. (c) For vicious ankylosis, or for deformities that cannot be overcome under anesthesia combined with tenotomy or extension. (d) As a substitute for the expectant plan of treatment, when the unfavorable surroundings of the patient or the slow course of the disease, make hopeless or even doubtful a recovery with sound ankylosis. (e) For chronic diseases of the knee joint when remote or unsound ankylosis appears to be the only means of securing a serviceable limb, especially when the parental or business demands of the patient must continue unfulfilled. (f) If rheumatic tendencies underlie the morbid process, all of the white fibrous tissue connecting the extremities of the bones should be removed to secure all immunity possible from subsequent attacks.—*American Journal of Medical Sciences*, February, 1892.

Cholecystotomy.—DR. WM. T. BULL describes this operation as follows: A four-inch vertical incision over the cartilage of the ninth rib exposed the abdominal cavity. The gall-bladder was easily brought into view by wedging the adjacent intestine out of the way with flat sponges. The fundus was aspirated and two drachms of bile removed. It was then opened, the wound held apart with artery clamps, and a calculus could be distinctly felt with the finger. The cystic and common duct were dilated and overhung by the duodenum, to which it was united by firm adhesions. In making the incision to remove the calculus the wall of the gut was incised for a distance of half an inch. The wound was closed with a continuous catgut suture through the mucous coat and outside this interrupted Lembert sutures. The incision in the wall of the duct was left open, a rubber drain inserted, and the edges of the incised gall-bladder sutured with catgut to the parietal peritoneum. The drain was surrounded with tampons of iodoform gauze, and the abdominal wound closed by silk sutures about them and the tube. Chloroform was the anesthetic. The calculus was oval, of the size and shape of a nutmeg and weighed 55 grains.—*Boston Medical and Surgical Journal*, January 21, 1892.

OPHTHALMOLOGY, OTOTOLOGY AND LARYNGOLOGY.

By WM. ELLERY BRIGGS, M. D., Sacramento, Cal.

Fatal Hemorrhage Following an Enucleation.—DR. J. H. THOMPSON cites a case of fatal hemorrhage following the enucleation of an eye for panophthalmitis, which occurred in his practice. The subject, a young man and an alcoholic, was wounded in the face by the accidental discharge of a gun. Some of the shot entered the eye, resulting in its total destruction, and necessitating enucleation. The operation was performed with no unusual occurrences. The hemorrhage at first did not seem excessive, but it continued in spite of the usual hemostatic measures. The blood was arterial and welled up from the depth of the orbit in such a way as to suggest the possibility of a traumatic aneurism having been opened. Everything was done, even to ligating all the tissues of the orbit, but the bleeding continued and death resulted. In conclusion, Dr. Thompson says: "I am inclined to the opinion that the fault was not in the character of the blood, but was in the walls of the arterioles, which melted away, as did the connective tissue which supported them. Whether this condition was the result of alcoholism I am unable to say, but think it very probable."—*Archives of Ophthalmology*, January, 1892.

Unocular Defects of Color Vision.—SIMEON SNELL calls attention to cases of unocular defects of color vision, which might be overlooked by a careful

examiner by the ordinary test methods. He, therefore, recommends that during such examinations the eyes should be examined separately.—*British Medical Journal*, January 30, 1892.

The Etiology of Inflammation of the Eye after Injury.—To the ophthalmologist no disease is more formidable; to the eye none more rapidly and often uncontrollably destructive than panophthalmitis. Theory after theory has been advanced as to its cause and mode of invasion, but none is as tenable as the microbic, lately in vogue. All concede this now, and the pathologist is daily seeking the offender. Lately this theory has gained prominence through DR. STANISŁAWA POPLAWSKA, who has made some most careful and trustworthy observations, both macroscopically and microscopically, on a number of eyes which were enucleated on account of panophthalmitis. In nearly all these specimens he found one of two varieties of bacilli—never more than one variety in the same eye. There is: (1) A small slender form, with no disposition to chain formation. (2) A large, long form. He further observed that the colony of bacilli was always found in the vitreous and in the vicinity of the foreign body, and never in the anterior chamber—a fact difficult of explanation. Here they begin their destructive processes, and the retinal and choroidal changes observed in panophthalmitis are due to the toxic effects of the bacillary products. How the bacilli enter the eye is answered in two ways: (1) They may be carried in with the foreign body. (2) They may be visitors from the conjunctival sac, having gained entrance through the wound. Until the bacillus can be cultured and inoculated this question will remain unsettled. In the Zurich clinic panophthalmitis never occurs, and this he accounts for by their rigid aseptic treatment of such wounds.—*Archives of Ophthalmology*, January, 1892.

Suppurative Otitis and Cerebral Symptoms after Posterior Tamponing for Severe Epistaxis.—DR. GELLÉ, in speaking of the post-nasal tampon, says: The tampon both opposes the exit of blood which has already penetrated the tympanum, and facilitates the penetration of purulent secretions into an ear previously unaffected. In both cases tamponing is bad. The blood in the nostrils, pent-up, putrifies, being mixed with the microorganisms contained in the nares, and the inflammation is septic. Infectious otitis, or bilateral suppurative otitis, appears simultaneously, and with the characters of gravity and rapidity of invasion common to the evolution of septic affections. If the obstacle be not removed in time, it is not the patient who will demand help—he may be in coma or delirium—and the diagnosis is made by the exit of infectious pus from one or both ears; or the patient may succumb to the propagation of the infection to the cranial cavity. [This terrible result is not rare; the author recorded a case in 1882, and has lately reported fresh instances.] Posterior tamponing is, therefore, dangerous, not only to the ears, but to life itself. It is not a more or less badly made tampon, but the tamponing itself which is a bad proceeding, and the longer the tampon remains *in situ* the greater the danger.—*Journal of Laryngology, Rhinology and Etiology*, January, 1892.

Skin-grafting by Thiersch's Method for Cicatricial Deformity of the Eyelids.—DR. J. H. WOODWARD reports two cases of deformity of the eyelids, which were greatly benefited by this method of skin-grafting. One was for cicatricial lagophthalmus in an upper lid, and the other for cicatricial ectropion of a lower lid with resulting epiphora. Both were advanced cases and of long standing. The following was the adopted procedure: The region of the eye

was thoroughly cleansed with soap and water, and afterwards disinfected with a 1:5000 bichloride solution; the conjunctival sac was irrigated with a saturated solution of boric acid and then the eye and surrounding parts covered with an antiseptic dressing. The shoulder from which the grafts were to be taken was prepared in the same way. Then measures were repeated three times during the 24 hours immediately preceding the operation. All instruments, sponges and dressings were sterilized by super-heated steam. The irrigating fluid used was a 1 per cent. sterilized solution of common salt. After removing the scar tissue and putting the wound in a favorable condition, ribbon-like grafts were removed from the shoulder, already prepared, large enough to completely cover the wound surface. A dressing of protective sterilized gauze was applied to the grafts and to the wounded shoulder, and these were thoroughly wetted with the saline solution every two hours, day and night. In about one week's time the wounds on the lids and shoulders were entirely healed and the patients were practically well.—*New York Medical Journal*, February 13, 1892.

DERMATOLOGY, SYPHILIS AND VENEREAL DISEASES.

By G. L. SIMMONS, JR., M. D., Sacramento, Cal.

Gout of the Penis.—DR. SPENCER SMYTH reports the following case of this affection: The patient was a Captain in the Royal Navy, married, and nearly 60 years of age. The penis was greatly swollen, with priapism, there being so small an orifice (from phimosis) for the escape of urine that it was necessary to slit up the prepuce. The organ was enveloped in lint, constantly wet with a sedative lotion; it was very tense and frightfully painful. The testes were unaffected. There was much "odor urinæ." At that time he did not complain of any particular uneasiness about any of the joints. Potas. bicarb c. colchico et magnes. sulph. were given in frequent doses, so that the bowels were relieved. The diet consisted chiefly of milk gruel. The attack of urethritis was followed by a copious discharge of muco-purulent matter. Upon the fifth day of the attack the priapism yielded, after which pains of a slight and transient character were manifested. The patient had had occasional attacks of gout in the right foot. At the time Dr. Smyth considered the case somewhat unique, not having met with a similar one during 20 years' work. Rheumatism he often witnessed attacking the testes and ending in urethritis; he regarded the case as one of gout attacking the penis, owing to the highly acid condition of the urine. No doubt having to relieve the phimosis at an early stage of the disease by operation contributed to a very great degree to the brevity of the attack, with the alkaline treatment then carried out.—*British Medical Journal*, January 30, 1892.

Syphilitic Fever in the New-born.—DR. J. ERÖSS bases his observation on five cases of congenital syphilis in the new-born. The fever may appear without any other accompaniments of syphilitic disease. It may be continuous or intermitting. If the evidences of congenital syphilis are strongly pronounced, the fever may be absent, and he is of the belief that in such cases it is probable that the fever existed in the intrauterine state, and that it only shows itself afterwards when new eruptions appear.—*Centralblatt f. klin. Medicin*, No. 52, 1891.

Senile Pruritus and its Treatment.—The *Deutsche med. Wochensch.*, No. 8, 1891, contains an interesting article on this subject. Strong meal or brau

baths once a day; an evening washing of the entire body with a solution of 2 per cent. carbolic acid; and thereafter a thorough dusting of the affected parts with a mixture of 20 gm. salicylate of bismuth to 90 gm. of starch.—*St. Petersburger med. Wochensch.*, No. 24, 1891.

Vesication in Incontinence of Urine.—SWAN (*British Medical Journal*) advises vesication of the nape of the neck as a successful treatment in incontinence of the urine.

A Therapeutic Note on Alopecia Areata.—DR. L. DUNCAN BULKLEY claims that 95 per cent. carbolic acid applied in small areas of denuded hair surface will facilitate the new growth of hair quicker than any other medicine. He applies it by a small cotton swab on areas no larger than two square inches at one time, and rubs the acid well into the tissues. The treatments are given no oftener than once in two weeks on the same patch.—*Journal Cutaneous and Genito-Urinary Diseases*, February, 1892.

Pilocarpin in Dermatology.—DR. ROBT. N. SIMON speaks enthusiastically of the action of pilocarpin in reducing the thickness of the skin in chronic eczema and scleroderma. He gives the notes of a case of very obstinate eczema in which 110 hypodermic injections of $\frac{1}{8}$ to $\frac{1}{6}$ grain of the drug were administered in a period of several months. The patient recovered completely. He also alludes to the value of this treatment in senile pruritus. In psoriasis and subacute eczema it is of no value.

Pigmentation of the Skin Caused by Crysarobin.—It is well known that when crysarobin ointment is used in the treatment of psoriasis the affected parts of the skin appear white, whilst the surrounding healthy skin appears yellowish red. CAMPANA (*Archiv. f. Dermatol. u. Syph.*) examined portions of the skin microscopically and found that the pigment in the surrounding integument was caused by the deposit of numerous blackish yellow particles of crysarobin within and between the epithelial cells. In the basic layer of the horny epidermis they are not found in the affected parts, because there the superficial layer of the epidermis does not exist. The absence of color in the psoriatic patches, therefore, depends on the absence of the part of the epidermis in which granules of crysarobin are deposited.—*British Medical Journal*, February 6, 1892.

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M. A., M. B., C. M., Professor of Clinical Medicine, University of California, San Francisco.

Atropine in Hemoptysis.—DR. N. W. NOBLE says the anatomical structure of the blood vessels in the lungs does not differ materially from that of the blood vessels of the body generally, but there is a vast difference in their nervous supply, the pulmonary vessels being practically free from vaso motor nerves, so that their tone is very slight, and the pressure in them is very little influenced by nervous stimulation, or by changes in the action of the heart, such as effect the systemic circulation. The action of small doses of atropine is to raise the systemic blood pressure temporarily; medium doses cause a rise, followed by a lowering of the pressure, while after large doses the primary rise is absent, and there is lowering of the blood pressure from the outset. In the treatment of pulmonary hemorrhage by means of subcutaneous injections of atropine the object is to lower the general systemic blood pressure, so that as much as possible of the blood may be retained in the peripheral circulation, and consequently it is evident that the drug must be given in large doses, in

order quickly to overcome the primary effect it possesses of increasing arterial pressure. The following is an illustrative case: A tubercular patient was suddenly attacked by severe hemorrhage from a ruptured blood vessel, in a small cavity, in the middle lobe of the left lung. Ice was applied externally and given by the mouth, and the normal liquid ergot injected hypodermically without in the least reducing the hemorrhage. Gallic acid was next given internally, together with injections of small doses of morphine, and the arms and legs were ligated, but the bleeding continued unabated; $\frac{1}{80}$ gr. of atropine sulphate was then injected; the pupils were dilated within a few minutes, and as soon as this was perceptible the bleeding diminished. One hour after the first dose it was repeated, and all other treatment stopped. A third dose was given four hours after the second, and to this $\frac{1}{16}$ gr. of morphine was added for the cough. The atropine was continued for three days in doses sufficient to maintain a well marked dilatation of the pupil. There was not any bleeding after the second dose of atropine had been administered, although blood-stained mucus was expectorated for several days. He concludes: (1) The vaso-motor control over the pulmonary arterioles is nearly *nil*. (2) Vaso-dilators acting on the systemic blood-vessels can have no effect on the pulmonary arteries. (3) Atropine in full medicinal doses diminishes blood pressure by causing dilatation of the peripheral vessels. (4) Atropine is, therefore, theoretically indicated in hemorrhage from the blood-vessels of the lungs.—*Medical Record*, January 2, 1892.

When a Sea Voyage is Appropriate.—Never send a patient to sea who is compelled to live on a limited diet, unless he can take the requisite food along with him, a ship being the poorest place in the world to obtain any special article of diet. More ground will be lost by patients under such circumstances in one week than can be regained in many months following on shore, even under the most favorable circumstances. There cannot be the slightest doubt that a sea voyage may be, and is, beneficial in a great majority of chronic cases, but it should be a voyage chosen for its especial adaptability to the case in question, and the climate, class of steamers, food, etc., should have the careful consideration of the family physician before he sends his patient on a month's journey by water, for a lack of information on the physician's part may mean no improvement to the patient, and may mean death, whereas positive knowledge would insure improvement.—*Journal American Medical Association*, December 19, 1891.

Nitro-Glycerine for Asphyxia.—In a case of asphyxia from the inhalation of illuminating gas, HOFFMANN succeeded in relieving the symptoms by the subcutaneous administration of nitro-glycerine in doses of one hundredth of a grain. The injection was made in the precordial region, and was followed by marvelously prompt results.—*Journal American Medical Association*, December 26, 1891.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M. D., Demonstrator of Pathology, and Adjunct to the Chair of Clinical Medicine, Cooper Medical College, San Francisco, Cal.

Examination of Sputum.—GABRITSCHESKY recommends the examination of sputum in sections. Schmidt is stated to have been the first to use this method, by which he was enabled to discover certain structures not to be seen in preparations made in the usual way. Cover-glass preparations are, in fact,

insufficient, since many cells are destroyed by the process involved, and the histological nature of many others, cannot be determined without preliminary fixation. As fixing and hardening fluids, the author employed alcohol, Müller's fluid, Flemming's solution, picric acid, and sublimate in concentrated form. Each of these reagents are reliable with the exception of Müller's fluid. The freshly expectorated sputum was allowed to fall directly into the hardening fluid; when hardened the mass was imbedded in celloidin, and so cut. Sputum, which is simply shiny, without sufficient tenacity, is not suitable for this method of examination. For staining the sections thus made safranin, alum-carmin, or logwood and rosin, may be used. In 3 out of 4 cases of pulmonary tuberculosis, giant cells were demonstrated in the sections of sputum.—*Deutsche med. Wochenschrift*, October 22, 1891.

Essential Paroxysmal Tachycardia.—DR. J. W. BRANNAN, in a paper upon this subject, refers to that form of tachycardia in which a very great exhilaration of the pulse, occurring in paroxysms, was the cardinal symptom. The paroxysm might last a few minutes, or it might extend, without interruption, over a period of several weeks. In the intervals between the attacks the heart-beat would be normal, both in force and in frequency, and the individual seemed to be in perfect health. There was no history of rheumatism, nor were any valvular murmurs detected. In 4 cases in which an autopsy was performed no anomaly was found. Dr. Brannan has collected only 27 cases of this rare disease. The attacks are characterized by extreme rapidity of the heart's action, which may attain 250 or even 300 pulsations a minute. It is very much like that produced by section of the pneumogastrics in animals. The pulse is usually regular, often not perceptible at the wrist, but to be found in the carotids and femorals. The attacks occur suddenly, as a rule, and at other times they follow some strong mental emotion or physical fatigue or effort. The face is usually very pale throughout the paroxysm, the pupils are normal. There may be moderate dyspnea. Anorexia and constipation are present with almost complete insomnia. The subjective sensations are variable, and include epigastric oppression, pain at the precordia and numbness of the left arm or general chilliness. The attack ends as abruptly as it began; the pulse dropping suddenly from 200 or more to 72 beats per minute. There is extreme cardiac distension as shown by the area of dulness. In discussing the etiology of the disease, Bouveret has drawn attention to the entire absence of hysteria, or neurosthenia in the cases collected by him, and there was no hereditary neurotic tendency. Of the 25 cases in which the sex was noted, 11 were in males and 14 in females. Over fatigue, either mental or physical, seems to be the chief cause of the affection; excessive smoking and the drinking of strong coffee were important factors. It seemed probable, on review of all the evidence, that in most cases there was a paresis of the vagus of central origin. The general conclusion was that the affection was a bulbar neurosis, confined to the cardiac centres of the vagus, in the medulla. The prognosis is very doubtful, especially at the beginning of a paroxysm. In the treatment of the disease it is first necessary to manage the paroxysms themselves, and next to prevent their recurrence. During the paroxysm the patient should rest in bed; all movements and exciting emotions should be avoided. Great caution must be exercised in examining the heart; in 2 cases percussion of the precordia had caused a return of the paroxysm. Digitalis was efficient in some cases and failed in others. Morphine might quiet the attack. Caffeine, nitrite of amyl, and nitro-glycerin were all

of no use. One patient was able to delay the paroxysm by taking a deep inspiration and then suspending breathing as long as possible. Dr. Wood had been able to arrest the tachycardiac paroxysms by having the patient swallow a quantity of hot or cold liquid. This influence, he thought, was due to stimulation of the inhibitory cardiac centre, produced by irritation of the peripheral nerve filaments of the stomach by the contact of the water. Compression of the vagus in the neck at the level of the thyroid cartilage was successful in slowing the heart in several cases. Electricity was sometimes of service, one pole being applied to the back of the neck and the other to the trunk of the vagus or the precordia. In endeavoring to prevent the recurrence of the paroxysms the chief reliance was on hygienic measures.—*New York Medical Journal*, December 26, 1891.

Affections of the Joints in Typhoid Fever.—The occurrence of inflammation of the joints in the course or during the convalescence of acute infectious diseases is, according to DR. FREYHANS, largely the result of observations made in the last decennium: Strack directed attention to affections of the joints following an epidemic of dysentery in the years 1760 and 1767. Since then observations have shown that other infectious diseases have also been followed by affections of the joints. In typhoid fever one or many joints may be involved, and the affection may speedily result in resolution or lead to destructive changes. During the last 3 years, Freyhans has collected 4 cases of typhoid inflammation of the joints. The joint affection was preceded by pains in the extremities and malaise; 3 of the cases recovered spontaneously, while the 4th is still under treatment. The affection in 2 of the cases occurred during convalescence, and in the other 2 during defervescence. The hip-joint was involved in 1 case, and in the others the wrist and knee-joints. Swelling of the affected joints was recognized, together with disturbances of function in more than $\frac{1}{2}$ of the cases. The affection having been observed most frequently in young persons, is attributable to the fact that typhoid fever is frequent at this period of life. The affection is diagnosed from tubercular joint inflammations by the involvement of many joints; whereas, in tuberculosis, the affection is non-articular; suppuration is frequent in tuberculosis, infrequent in typhoid arthritis. The latter inflammation produces a regular, and the former an irregular swelling; and, finally, the typhoid inflammation is capable of spontaneous cure, which is a rare occurrence in tuberculous arthritis. The prognosis is usually good, no fatal case having thus far been recorded. The treatment is purely expectative. The joints are to be immobilized and the salicylates are recommended.—*Berliner Klinik.*, December, 1891.

The Treatment of Pleuritis.—FIEDLER, (*Jahres bericht der Ges. f. natur-und-heilkunde*) refers to the etiological identity of rheumatic polyarthritis and certain forms of acute pleuritis, as a guide for the favorable action of salicylic acid in such cases. He has used salicylic acid for years in cases of pleuritis where no tuberculosis was shown to exist, and is convinced, from long experience, that if it is given early enough before the appearance of the exudation, the disease may be aborted. Large doses, up to 6 gm. of the salicylate of soda, are administered. Little is to be expected from the salicylate after the occurrence of an exudation. He is also convinced of the utility of this preparation in genuine cases of pericarditis.—*Münchener med. Wochenschrift*, November 24, 1891.

DR. TALAMON directs attention to the efficient action of salicylate of sodium in the treatment of pleurisy with effusion. He reports cases showing how after

administration of the drug, rapid resorption of the effusion occurred. In 3 of the cases thoracentesis had already been twice performed, but the fluid had accumulated as abundantly as before. The salicylate of sodium was then given with the result that, at the end of a week the effusion had disappeared. A diminution of fluid was noted on the second day of the treatment. He does not attribute the action of the salicylate to its diuretic properties, for while it may increase the quantity of urine, diuresis can also be provoked by other drugs, and yet the pleural effusion remains the same. The salicylate of sodium, according to the author, should be given for a week, the dose being 15 grains, 4 to 6 times a day. The more recent the pleurisy the better the action of the drug. It is especially indicated, after thoracentesis, to complete the resorption of the exudation and prevent its reaccumulation.—*Médecine Moderne*.

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. HOISHOLT, M. D., Assistant Physician, State Asylum for Insane, Stockton, Cal.

Relations of Albuminuria to Psychoses.—In an article on this subject DR. RAYMOND says that the albuminuria, present in mental disease, is either dependent upon the affection of the nervous centres, or it is due to disturbance in the renal function, in which case it may become the direct cause of mental ailment; sometimes a relapse of the latter may go hand in hand with a return or increase of the albuminuria. In alcoholists the amount of albumin in the urine varied with the intensity of the delirium, and it often occurred in the delirium of alcoholism, when, in the case of death of the patient, no affection of the kidney could be found. In other forms of mental disease albuminuria is met with principally in the acute stage; frequently a certain relationship between the degree of the delirium and that of the albuminuria is noticeable. Upon administration of digitalis the edema disappears, the albumin in the urine is increased, and the delirium passes away. The albuminuria, therefore, brings about a poisoning of the system, which, under certain circumstances, gives rise to the development of or causes an increase in the psychical disturbance. In the course of chronic nephritis delirium, simulating insanity, may occur with the uremic intoxication. The cases reported by the author illustrate this. The maniacal excitement, combined with religious and erotic delusions and hallucinations, occurred in individuals having no hereditary disposition during attacks of uremia of chronic nephritis. Dieulafoy calls this disease "folie brightique." The treatment of these cases does not consist of the application of the cold douche, nourishment, etc., but must be directed towards the affection of the kidney; exclusive milk diet.—*Centralblatt f. klin. Medicin*.

Sudden Death in Mania.—DR. JAMES R. WHITWELL discusses the pathology of sudden death occurring in the course of acute mania, and is of the opinion that, in cases in which sudden collapse occurs, and in which the presence of recent hemorrhage can be excluded, some pulmonary or cardiac condition is likely to be found of sufficient magnitude and gravity to be the immediate cause of death. Of the cardiac conditions found under those circumstances, the most common is organic valvular lesion, or some change in the muscle, such as fatty degeneration, while the most frequent pathological disturbances in the lung are congestion and edema, or actual pneumonia. Edema may be caused by heart lesion, or pulmonary embolism not always associated with cardiac abnormality. Pneumonia in such cases may be the result of cardiac or other com-

plications, or may be an intercurrent disease of the same nature as that of the epidemic form, or it may be an inflammatory condition of the lung, superadded to, and probably dependent upon, fat embolism. The author quotes two cases in which death occurred suddenly in the course of acute mania; it was preceded by collapse and cynosis, but without marked failure of the pulse such as is to be expected in syncope. In the first case *post-mortem* examination revealed marked pulmonary edema, associated with fat embolism. Sections stained with osmic acid showed emboli scattered throughout them, both in the capillary vessels and in the smaller branches of the pulmonary artery. In the second case embolic areas were also visible, associated with hepatization, and numerous fat emboli were found. Regarding the source of the fat, Dr. Whitwell thinks that it may be due to some obscure change in the blood, producing a condition of lipemia, and that it may possibly originate in the bone-marrow and occur as the result of long-continued and severe mania or convulsions. Fat embolism is, therefore, he says, a not uncommon cause of sudden collapse, resulting sometimes in death. This condition is suggested during life by the collapse, dusky pallor, or cyanosis and dyspnea, with the usual physical signs of pulmonary or secondary embolic pneumonia.—*Journal of Mental Science—Lancet.*

Moral Insanity.—PROF. G. H. SAVAGE says that moral insanity is in many cases a state or stage of mental disease and not a fixed or permanent type or condition itself, there being in many cases of acute mental disease a period of moral perversion, the moral relationships being almost the first to be affected in cases in which slow progressive degeneration is taking place. He classifies moral insanity under two heads: primary and secondary. Under the first he includes those cases in which from the initial development there has been some peculiarity or eccentricity of character exhibited purely on the social side, cases in which from childhood there has been some moral obliquity or inability to control their lower natures. Such individuals come into the world quite unfitted to adapt themselves to the conventionalities of society; inheritance of a neurosis plays, in the opinion of Dr. Savage, a prominent and all-important part in their moral defect. The moral state of the offspring may be indebted to illness of or accident to the parents, or to some constitutional disease, such as syphilis. The secondary form of moral insanity may have some general cause, such as intoxication, or it may follow some distinct attack of mental disease. In cases where there has been instability from birth, it is not uncommon to find some precocity, not only of the intellectual faculties, but also of the animal passions; sexual desires for instance, may be developed almost at any age. Persistent lying and the power of romancing are frequent characteristics. The habit of lying may be of a harmless type, or it may be of a malicious type, tending to damage others either from spite or to escape punishment. In some children the disease is indicated by cruelty to dumb animals; in others the so-called pyromania is present, such children often becoming exceedingly dangerous both to life and property. In other cases masturbation is practised, the habit having not only an evil influence upon themselves but also upon others, and it may develop into uncontrolled sexual passions, and even beastiality of the lowest description. As they grow up the tendency to crime, drink, and vice shows itself. Oftentimes the borderland between crime and insanity in such cases is difficult to distinguish, and by far the most difficult medico-legal cases to handle are those in whom the intellectual powers seem to be intact, but in

whom the social relationships are not fully appreciated. Such cases are met with among patients who have had an attack of insanity. They may be looked upon as a kind of partial moral dementia. When such moral condition lasts twelve months or more the prospect of future improvement is very small.—*Medical Press and Circular*.

The Condition of the Intercortical Fibres in Dementia.—KERAVAL and TARGOULA report the result of microscopical examinations undertaken in the last stages of general paralysis and in secondary dementia to ascertain the condition of the intercortical fibres in the brain. They found that the medullated fibres disappear to a large extent in the advanced stages of general paralysis, and the same was the case also in secondary dementia, whatever might have been the form of the primary mental disorder. The frontal lobe is the region of the brain most involved, and in it the gyrus rectus (gyrus frontalis superior) is the portion that invariably suffers most. The region which is least involved is the gyrus paracentralis. The morbid process was found to extend irregularly throughout the different layers of the cortical substance; the latest remaining medullated nerve-fibres being found nearest to the white substance. The process of atrophy of the fibres did not, as a rule, involve the meninges.—*Progrès Médical*.

Morphine in Insanity.—PROF. VOISIN finds morphine especially useful in a number of forms of insanity, and thinks its dangers have been a little exaggerated. It is of value, particularly where pain is present, and it would seem that this is not always considered in cases of insanity, especially in cases of hypochondriasis, in which too little account is often taken of the complaint of patients. One great advantage of morphine in the treatment of insanity is that it can be employed hypodermically. Voisin commences with small doses, one to two milligrammes, and increases one milligramme a day for several days, after which the dose remains stationary; but he often finds it necessary to give two injections daily. Very satisfactory results have been obtained in neuro-pathic cases where anemia of the brain is thought to be present. It is injurious, however, in congestive and inflammatory insanity, and in that connected with an atheromatous condition of the arteries. Idiosyncracies in the action of the drug are not infrequent. Some patients cannot tolerate it at all; it should only be employed where it produces its normal physiological effects.—*American Journal of Insanity*, January, 1892.

New Operations in Cranio-cerebral Surgery.—Among the recent procedures in cranio-cerebral surgery, the most noted is that of DR. LANNELOGUE to relieve idiocy by means of craniectomy. It occurred to the operator that by overcoming the pressure of the skull, preferably in the region of the centres presiding over animal life, the brain might be given an opportunity to develop in case of restricted or retarded growth. His first operation was performed on a scapho-cephalic and idiotic child, 4 years old. A narrow incision through the bone nine centimetres long, was made parallel to the sagittal suture, and about a finger's width from the median line. The lips of the wound were closed without drainage, being careful not to include the periosteal tissue about the bony opening. Mental improvement was observed four weeks after the operation; the child grew quieter, took notice of things about her, played, laughed, and commenced to talk. Other operations were equally successful, sometimes whole strips of osteo-periosteal tissue being removed. Possibly this

procedure may to some extent benefit a condition hitherto considered hopeless.
—*Gazette des Hôpitaux*—*Journal of Nervous and Mental Disease*.

FORMULÆ.

By GEO. B. SOMERS, M. D., San Francisco, Cal.

Cardiac Tonic.—DR. J. O. HIRSCHFELDER, San Francisco, in a clinical lecture recommends the following:

Caffeine
Benzoate of soda.....āā 3i
Strychnine.....gr. $\frac{1}{2}$
Camphorated water.....3vi

S.—Tablespoonful three times a day.

Chloralamid.—GALIANA gives the following:

1. Chloralamid.....gr. xxx
Dilute hydrochloric
acid.....gtt. v
Distilled water.....3ii
Syrup.....3ii

S.—For two doses.

2. Chloralamid.....gr. xv
Infusion of tea.
Sugar āā enough to make a
sweet solution.

S.—At a dose.—*Médecine Moderne*.

Quinine for Infants.—LUTZ has proposed the following formula, which masks the bitter taste:

Sulphate of quinine.....gr. viii
Dilute sulphuric acid.....
1 per cent.....m. viii
Essence of peppermint.....m. v
Saturated solution.....
saccharine.....3ii ss
Water.....3iii

—*Gazette des Hôpitaux*.

Mouth Wash.—In an article on the mouth as a focus of infection for various diseases, MILLER highly recommends the following as an antiseptic mouth wash:

Benzoic acid.....3i
Tinct. eucalypti.....3v
Absolute alcohol.....3iv
Ol. menth. pip.....gtt. x

—*Brooklyn Medical Journal*.

Itching Affections of the Skin.—SHOEMAKER.

Salol.
Menthol.....āā gr. x
Carbonate of lead.....3ss
Vaseline q. s.....ad 3i

S.—Apply 5 or 6 times a day.—*Nouveaux Remèdes*.

Hematemesis from Gastric Ulcer.—BAMBERGER.

1. Powd. acetate of lead...gr. iii
Hydrochlor. of morph...gr. i ss
White sugar.....3i ss
Mix and divide into six doses.

S.—One every two hours.

2. Powdered tannic acid...gr. x
Powdered opium.....gr. ii
White sugar.....3i ss
Mix and divide into six doses.

S.—One every two hours.—*Union Médical*.

Antisepsis of the Intestinal Canal.—DUJARDIN-BEAUMETZ.

Salol.
Salicylate of bismuth.
Bicarbonate of soda...āā 3ii ss
For 30 cachets.

S.—One cachet after breakfast and dinner.—*Nouveaux Remèdes*.

Refrigerant Lanoline Ointments.—UNNA has found that if lanoline fat and water be mixed in certain proportions the water easily evaporates, thus producing a cooling application:

1. *Ointment to be used as a cold cream.*

Anhydrous lanoline...10 parts
Benzoated lard.....20 parts
Rose water.....30 parts

2. *Imitation of Goulard's cerate.*

Anhydrous lanoline...10 parts
Benzoated lard.....20 parts
Solution subac. of lead 30 parts

3. *Salve for burns.*

Anhydrous lanoline...10 parts
Benzoated lard.....20 parts
Lime water.....30 parts

4. *Refrigerant zinc ointment.*

Anhydrous lanoline...10 parts
Benzoated zinc.....
ointment.....20 parts
Rose water.....30 parts

—*American Practitioner and News*.

Hydrochloric Acid in Diphtheria.

—ROUX and YERSIN have shown that the virulence of the diphtheritic toxins may be greatly diminished by the local application of small quantities of acid. KRAZENSKI employs hydrochloric acid in the following formula:

1. Perchloride of iron..... 3 i
Medicinal hydrochloric acid..... m. xv
Distilled water..... 3 vi

S.—A teaspoonful every 15 minutes for four doses, then every 30 minutes for 3 or 4 hours, finally every hour.

2. Perchloride of iron..... 3 ii
Hydrochloric acid..... m. xv
Distilled water..... 3 i

S.—Apply locally every two hours.
—*Times and Register.*

Hydropsy of Cardiac Origin.—FURBRINGER.

- | | |
|---|--------|
| Digitalis leaves..... | 3 ss |
| Boiling water | 3 viii |
| Make an infusion and add citrate of caffeine..... | 3 ss |
| Tinct. strophanthus..... | 3 i |
| Acetate of potash..... | 3 v |
| Extract of licorice..... | 3 i |

S.—The whole to be taken in spoonful doses within 48 hours.—*Union Médical.*

Absorbent Powder.

- | | |
|---------------------|------|
| Salicylic acid..... | 3 i |
| Starch | 3 ii |
| Talc | 3 i |

S.—To dust on the parts of the body which are affected in the night sweats of phthisis.—*Union Médical.*

PUBLIC HEALTH.

By W. R. CLUNESS, M.A., M.D., Sacramento, Cal.

Mortality.—The deaths registered in 118 town districts of the State during the past month, in a population of 810,833, correspond to an annual rate of 23.88 a thousand, the total mortality having been 1,620. 128 deaths were due to zymotic diseases, giving an annual rate of 1.78 a thousand. Of these, 41 were due to diphtheria, 6 to cholera infantum, 28 to typhoid fever, 5 to diarrhea and dysentery, 10 to cerebro-spinal fever, 7 to whooping cough, 15 to croup, 5 to measles, and 2 to remittent and intermittent fevers. 595 deaths resulted from diseases of the respiratory organs, giving an annual rate of 8.79 a thousand. Of these 224 were due to consumption, 284 to pneumonia, 75 to acute bronchitis, and 12 to pulmonary congestion; the rate being for consumption and pneumonia 3.31 and 4.20, respectively. 110 deaths resulted from diseases of the heart. The average annual death rate from all causes, occurring in the ten largest cities and towns in the State, and representing a population of 542,000, was 25.20 a thousand. The highest rate for the month, occurring in cities having a population of 10,000 or more inhabitants, was reported from San Jose, the lowest from Alameda.

METEOROLOGY.

By J. W. ROBERTSON, B.A., M.D., San Francisco, Cal.

Summary for January.—*Temperature.*—Unusually pleasant and open weather was reported from all stations in the coast and valley belts. Even on the coast it occasionally happens that a snow storm occurs during this month, but neither snow, ice nor frost was noted. The lowest point to which the thermometer fell was 37°, while the mean was above 50°. In the extreme north, including the Siskiyou range, the usual cold and disagreeable weather prevailed. At several stations in the valley belt, which includes the foothills and greater part of Southern California, the temperature fell below 32°, but the mean temperature was above 45°.

Rainfall.—Few stations registered three inches, the majority being but little over an inch. The number of days on which rain fell are remarkably small.

California—Tabular Statement for January, 1892.

STATIONS.	TEMPERATURE.						RAINFALL.		Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
	Mean.....	Highest	Lowest.....	Mean High- est.....	Mean Low- est.....	Mean Daily Range	No. of Days Rain Fell.....	Total Rain- fall.....		No. of Clear Days.....	No. of Fair Days.....	No. of Cloudy Days.....		
Auburn	50.2	74.0	35.0	56.2	44.9	11.3	9	4.00	68.0	16	2	13	S.E.	Southern Pacific Company.
Berkeley.....	49.9	62.0	38.8					2.34					S.W.	Obs. University of California.
Colfax.....	43.9	60.0	30.0					4.85		8	7	16	N.E.	Southern Pacific Company.
Eureka.....	48.0	64.0	33.0	54.2	41.8	12.4	11	3.29	90.0				N.	Weather Bureau Dept. Agr.
Fresno.....	48.5	69.0	30.0	58.4	38.6	19.8	4	0.48	75.0	7	14	10	N.W.	"
Keeler.	40.2	61.0	23.0	48.6	31.9	16.7	3	0.26	58.0	17	9	5	E.	"
Los Angeles....	57.0	81.0	37.0	68.0	45.0	23.0	6	0.88	60.0	14	9	8	N.E.	"
Monterey	52.3	68.0	30.0					0.66					S.	Southern Pacific Company.
Napa.....	45.6	61.0	31.0	54.8	38.5	16.3	7	3.65	72.0	18	6	7	N. & S.	Station Napa Insane Asylum.
Oakland.....	49.48	71.0	37.0	61.35	43.20	18.16	9	2.31	87.2	15	12	4		Chabot Observatory.
Paso Robles....	45.6	68.0	25.0					0.63					N.	Southern Pacific Company.
Red Bluff.....	47.0	69.0	32.0	56.2	37.8	18.4	9	4.30	74.0	15	11	5	N.W.	Weather Bureau Dept. Agr.
Sacramento....	48.4	64.0	33.0	57.1	39.7	17.4	7	1.78	76.0	13	10	8	N.W.	"
San Bernardino	52.9	74.0	30.0	65.9	39.7	26.2	5	3.24	67.0	18	11	2	N.	A. K. Johnson, M. D.
San Diego.....	55.1	75.0	38.0	64.2	46.0	18.2	5	1.58	61.0	14	12	5	N.W.	Weather Bureau Dept. Agr.
San Francisco..	51.7	66.0	40.0	57.5	45.9	11.6	8	2.42		13	9	9	N.	"
Santa Barbara..	54.5	75.0	37.5	65.1	44.0	21.1	4	1.10	64.0	20	3	8	W.	Hugh D. Vail.
Santa Cruz.....	50.5	68.0	30.0				2	1.40					S.W.	W. R. Springer.
Yuma.....	57.0	77.0	32.0	68.2	45.2	23.0	4	1.85	36.0	22	5	4	N.	Weather Bureau Dept. Agr.

Blank (----) indicates data missing.

Occidental Medical Times

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: MARCH, 1892.

VARIOLA AT THE U. S. QUARANTINE STATION, SAN FRANCISCO.

On January 20, 1892, the P. M. S. S. Co.'s steamer "City of Rio de Janeiro" arrived at San Francisco flying the yellow flag. On boarding her, DR. WM. M. LAWLOR, the quarantine officer of the port, found a case of varioloid, and ascertained that a passenger suffering from variola had been landed at Honolulu on the 11th of the month, the case of varioloid having developed on the 17th. The 529 steerage passengers, with six customs inspectors, were transferred to the U. S. Quarantine Station on Angel Island, in charge of DR. W. P. MCINTOSH. The cabin passengers, steamship and crew were disinfected, and the latter (84 Chinese) were vaccinated and detained on the steamer for 14 days, no cases appearing amongst them.

It is the invariable custom on the China steamers to vaccinate the steerage passengers on the first day out, and this was done by DR. MCGOWAN, the ship's surgeon. We have been unable to ascertain from the company the source of the virus used, or what care had been exercised in maintaining its efficiency. We understand that it was on quill points, and these were used as vaccinators. Judging from the local appearances the vaccination took in very few cases, and, according to the statements of the passengers, not many of them had sore arms. At the Quarantine Station vaccination was commenced on January 26th, the delay being due to want of reliable virus, and was continued daily until all had been vaccinated, the time required being three days. The arms were inspected on the sixth day and for several days after, and all that did not present satisfactory sores were revaccinated. The first case of small-pox at the station occurred on the 26th, followed by another on the same day, then two on the 27th, and two on the 29th; one of these was confluent, but does not appear to have been reported until in that condition. There were then no cases until February 9th, when three appeared, followed by one on the 11th, and two on the 13th. At this date all persons about whom there might have been any doubt were again vaccinated. By an inherent perversity several of the Chinese

were found to have removed the virus from each other by suction, and in this way it is quite possible to account for the second series of cases. In two of the passengers vaccinated a good sore was produced, though each was well pitted from a previous attack of variola. In the case of a boy, 13 years old, the vaccinia and variola ran their course together, the arm showing a well marked pock. Though this case was confluent, it was moderately mild.

From the foregoing it is very evident that the vaccination performed on shipboard was comparatively valueless. In the absence of a detailed record of each individual it is impossible to say that it was absolutely valueless, but it certainly was practically worthless. It is much to be regretted that facilities were not at hand to vaccinate all the passengers upon arrival at the station. This might not have prevented the first series of cases, but it would have further modified them. There was throughout great complaint of insufficient accommodation and overcrowding, but this we propose to notice at another time, at present merely stating that the capacity of the station is about one-half of that which it was required to provide for.

The impression is current, mainly through the influence of the enterprising reporter, that considerable friction existed between DR. LAWLOR, as quarantine officer, and DR. MCINTOSH, as surgeon in charge of the quarantine station. Under the circumstances there could be no conflict of authority; still the divided responsibility existing is suggestive of possible encounters, as each officer endeavored to do his duty as he regarded it. It is very much to be regretted that anything of the kind should have occurred, and viewed professionally it is certainly discreditable. The daily papers seized upon the situation, and having developed difficulties of some magnitude, maintained them constantly with fresh recitals. This was the principal source of the trouble, that would have passed into oblivion but for the watchful care of the reporter. While both gentlemen occupy official positions that renders a large amount of publicity unavoidable, we still feel that it would have been more judicious to have kept out of the papers in the controversy, and trust that experience will not be without a lesson.

DR. WHITWELL AND THE SAN MATEO COUNTY SUPERVISORS.

We have already on more than one occasion referred to the war which the Supervisors of San Mateo county are waging upon DR. W. S. WHITWELL, who has for some time been successfully conducting a private asy-

lum about two miles from San Mateo. The Supervisors are really a catspaw in the hands of interested property holders, who have succeeded in procuring the passage of successive ordinances, each more preposterous than its predecessor, and all framed for the purpose of seriously impeding, if not prohibiting, the conduct of an institution of this character within the county. The third and last attempt, officially known as Ordinance No. 99, was recently adopted by a vote of 4 to 1, the only member of the Board possessing sufficient intelligence and independence to vote against it being Supervisor JOHN STAFFORD. The following are the more important sections of the ordinance, shorn of legal phraseology and general verbosity:

SEC. 2. Before any license shall be issued there shall be filed with the County Clerk a statement of location of proposed place of business, distance from nearest dwelling-house owned or occupied by any other person, class of persons applicant intends to receive, whether same are to be male or female, name of person having direction and control of the business, the name and names of attending physician or physicians, of the general superintendent, and the limit of the number of persons that is intended to treat at any one time. An architect's diagram of the premises, drawn to a scale of not less than one eighth of an inch to a foot, with a statement of the height of the ceilings, and an official survey and description of the land to be used in connection therewith, must also be furnished.

SEC. 3. The building and buildings are to be what are usually known as fire-proof, by reason of being constructed of brick and iron, or stone and iron, and not more than two stories in height, and the same, and the land used in connection therewith, or such part of said land as any of the patients are to have access to is to be surrounded by a brick or stone wall not less than 18 inches in thickness and not less than 12 feet in height, in which wall there is but one opening, which opening is closed by a solid iron door, which door is so constructed and fitted into said wall as that the same may be securely fastened by a combination lock, and said door is furnished with a combination lock. No license shall be granted if the premises are within a distance of 400 yards from any dwelling-house or school-house.

SEC. 4. No license shall authorize male and female persons, or more than one of the classes of persons designated in Sec. 1 [insane or inebriates] hereof to be cared for or treated in the same building, or to be together in the same building, or in any inclosure connected with any building.

SEC. 5. Male persons only shall superintend or be employed in the buildings and grounds licensed to be used in connection with the care, custody, or treatment of male persons; and female persons only shall superintend or be employed in the buildings and grounds licensed to be used in connection with the care, custody, or treatment of female persons, excepting that the superintending physician may in any case be a man.

SEC. 6. It shall be unlawful to receive any person except upon the certificate of two reputable physicians practising their profession in the

county of San Mateo, and not interested in or employed in such business or any business licensed hereunder, which certificate shall state that they, each of them have as physicians personally examined the person designated therein, and that in their opinion such person is suffering from some specific ailment, and that they recommend that such person be admitted. A duplicate of such certificate shall first have been filed with the Clerk of said Board of Supervisors. If the person designated in such certificate is not a resident of the county of San Mateo, there shall also be filed with said Clerk a duly authenticated certificate of two reputable physicians practising their profession in the county of the residence of the person referred to and not interested in or employed in similar business to that licensed hereunder.

SEC. 7. There shall be kept by every licensee hereunder upon the premises used by him a complete and detailed register of the names, places of residence, sex, age, so far as it can be ascertained, mental and physical condition when received, and date of arrival of each inmate, the changes, if any, in his or her physical or mental condition, and the date of his or her departure from the premises, should he or she depart, with the reason for such departure, which record shall, between the hours of 9 A. M. and 5 P. M. of each day, be open to the inspection of any person who shall at such premises request of any person on duty there permission to examine the same.

SEC. 8. The premises shall at all times be open to the examination and inspection in every part thereof of the Superior Judge and the Chairman of the Board of Supervisors of the county of San Mateo, and the Justices of the Peace of the township in which the same are situate.

SEC. 10. There shall be paid an annual license tax of the sum of \$100, with two good and sufficient sureties in the penal sum of \$500.

SEC. 11. It shall be unlawful to allow the door in the wall surrounding the premises to be unlocked or open excepting when the same shall be in the immediate charge of a competent attendant, and it shall be unlawful for any inmate of such premises to leave the same save upon discharge therefrom, excepting when he or she shall be attended by a competent attendant whose sole care during such time shall be devoted to such inmate, and whose duty it shall be to safely return such inmate within the walls.

SEC. 14. Each violation of any of the provisions of this ordinance by any person holding a license, or by any agent, employe, or servant shall render the holder of such license and his sureties liable to the county of San Mateo in the sum of \$100, and the holder of such license shall therefor pay to said county the sum of \$100, which sum with attorney's fee and costs may be recovered by the county of San Mateo from the persons so rendered liable in a civil action.

SEC. 15. A violation of any of the provisions of Section 11 by any agent, employe, or servant shall be a misdemeanor and the person guilty thereof shall be punished by imprisonment in the county jail for not less than one month nor more than six months in the discretion of the Justice.

SEC. 16. A violation of any of the provisions of this ordinance other than those contained in Section 11 by any person, firm, or corporation not at the time a licensee, shall be a misdemeanor, and shall be punished by a forfeiture of the sum of \$100 and imprisonment in the county jail for the term of one month.

SEC. 17. When violations of any provisions of this ordinance are in the nature of a continuing act, each day's continuance shall be deemed a new and independent one and punishable as such, and in the event that a second or subsequent conviction shall be had hereunder before the expiration of a term of imprisonment imposed as a punishment upon a previous conviction the terms of imprisonment imposed shall not run concurrently, but one upon the expiration of another in the order in which the same shall have been imposed.

We have given this ordinance at length, believing that it is worthy of the attention of the profession in general. If a Board of Supervisors can enforce restrictive legislation of this character it will imperil the existence of similar institutions elsewhere. Sec. 2 is designed to be vexatious and troublesome, but might be justified. Sec. 3 is practically prohibitive; the expense would be enormous, requiring an investment of capital upon which no possible return could be expected. There is the further contention that restrictions of this kind have long since been abandoned and are wholly unnecessary. Sec. 4 is designed to add to the expense of the institution and to facilitate possible violations. Secs. 6, 7 and 8 effectually destroy the essential element of privacy, to provide which establishments of this kind exist. We believe in the proper inspection of these and similar institutions by competent authority, preferably by an independent commission created by the State and responsible only to the Governor, but the most rigid inspection neither requires nor demands the publicity here sought to be enforced. There is absolutely no need for certificates from physicians in San Mateo when all that the law requires has been furnished elsewhere except to insure further publicity and add expense and annoyance. The penalties in sections 14, 15, 16 and 17 are more severe than those attached to graver misdemeanors in many cases.

We do not suppose that the Board of Supervisors, or its legal advisers, believe for one moment that legislation of this character will be permitted by the courts. If such were permissible it would justify interference with the rights and liberties of the individual to almost any extent. On the other hand, it seems evident that DR. WHITWELL will be brought into Court, subjected there to loss of money and time and considerable annoyance, and finally, perhaps, compelled to appeal from an adverse decision to a higher court. While this would certainly be favorable we regret that there appears to be nothing to prevent a repetition of the same course indefinitely. The remedy must be found in the education of public opinion, and it is here that professional assistance is most needed.

THE EPIDEMIC OF INFLUENZA.

The recent epidemic of influenza, when contrasted with the two preceding epidemics of this affection, was characterized by its mildness, the number of genuine cases being comparatively small in many localities. A large number of cases occurred in children. Three groups of cases could be differentiated. To the first group, and by far the majority, the affection was characterized by a remittent type of temperature, rarely exceeding 103° F., exacerbating in the afternoon and lasting, as a rule, about two and rarely longer than three days. The subjective symptoms were those peculiar to any febrile affection. With the rise in temperature, a swelling of the submaxillary lymphatic glands on one or both sides was noticed. These glands were painful on pressure. There might be a slight angina.

In a second group of cases, fever and swelling of the submaxillary lymph glands were present with slight hyperemia of the fauces. On the third day, however, without any particular manifestation, the follicles of the tonsils were occupied by tonsillar plugs. These were evidently cases of deep-seated follicular tonsillitis. The third group of cases included bronchial and pneumonic implication. Occurring in adults, the bronchitis was confined to the smaller tubes, and was especially resistant to treatment. In a few cases belonging to the first and second groups, the febrile course was somewhat identical with that of intermittent fever, a slight chill followed by fever and sweating occurring at a definite time every day. In three cases noted where the rise in temperature persisted for four or more days, albuminuria, together with urinary casts was present, and these symptoms persisted after subsidence of the temperature. Relapses were frequent and more severe than the original affection. Prostration was a characteristic symptom in a few mild cases. The treatment pursued, as a rule, has been symptomatic.

Much has recently been done in investigating the etiology of influenza. In the *Deutsche medicinische Wochenschrift*, of January 14, 1892, appear three important articles. R. PFEIFFER believes he has discovered a characteristic bacillus of influenza; pure cultures of these bacilli from the sputa have been made by KITASATO; and, finally, CANON has found the same bacilli in the blood of patients affected with influenza. The bacilli discovered by PFEIFFER are similar to those found by him two years ago. They are small and with difficulty stained by the basic aniline dyes. Better staining is obtained with the solution of ZIEHL, or

with a hot solution of methyl-blue. The poles of the influenza bacilli are more intensely stained than the bodies. Apes and rabbits inoculated with the bacilli yielded positive results. Rats, guinea pigs and mice proved refractory to the inoculations. The bacilli having been found in large numbers in the sputum suggests to PFEIFFER the possible communication of the disease through this medium. He therefore urges that proper care be taken in the disposal of the sputum.

NOTES.

A Correction.

The title of Dr. McKone's paper, published at page 58 of our issue of February, should read "A Case of Enchondroma of the Perineum," not "Sarcoma," as printed.

The Southern California Practitioner.

The *Southern California Practitioner* with its January issue began a new volume greatly improved in appearance. A new and artistic title and cover have been adopted, a new dress donned, and a change for the better in paper has also been made. The *Practitioner* has ever been faithful to the interests of Southern California, and in return deserves the loyal support of its constituency.

Reported Removal of the Marine Hospital, San Francisco.

Recently, reports have been current in the San Francisco papers that the Marine Hospital was soon to be moved, presumably to one of the islands in the bay. The reason assigned for the change was its present exposed situation in case of an attack on San Francisco by a hostile fleet. On inquiry we find that the only foundation for the report rests in the brains of some real estate agents who are anxious for the possibility of a most desirable site being placed upon the market. An alleged interview with Dr. P. H. Bailhache, the surgeon in charge, was simply a "fake," that gentleman never having seen a reporter, nor authorized any publication in the matter.

The International Medical Magazine.

The *International Medical Magazine* appears for the first time in February, the date of publication being the 15th. It is edited by Dr. Judson Daland, and published by the J. B. Lippincott Co. of Philadelphia. In general style and make-up it is similar to the *American Journal of the Medical Sciences*, and is, therefore, a medical review. It is, however, of larger size, and the field of medical science in its departments has been further divided. A distinctive feature will be the publication of clinical lectures, several of which appear in the present number. The J. B. Lippincott Co. are accustomed to do things in a liberal manner,

and it is, therefore, possible that they may succeed in making this really an international medical journal. The subscription is \$4 per annum.

Washington State Medical Society.

The Washington State Medical Society will hold its next annual meeting at Walla Walla, May 15, 1892. The following are Chairmen of the various committees: Anatomy and Physiology, John South, Hoquim; Chemistry and Bacteriology, H. J. Essig, Spokane; Materia Medica, J. J. Shannon, Seattle; Medicine, C. K. Merriam, Spokane; Surgery, Jas. J. McKone, Tacoma; History and Necrology, G. A. Weed, Seattle; Publication, E. E. Heg, North Yakima; Ophthalmology, F. H. Coe, Seattle; Obstetrics, T. V. Goodspeed, Seattle; Nervous System, Wilson Lockhart, Spokane; State Medicine, G. S. Armstrong, Olympia; Revision of Constitution and By-laws, H. C. Williston, Port Townsend; Arrangements, Wm. Wenslick, Port Townsend.

Medical Society of the State of California.

The annual meeting of the State Society will be held in Union Hall, Post street, San Francisco, from April 19th to 23d, when it is hoped that the profession will be largely represented. The committee of arrangements has obtained a reduction of 33 per cent. on round trip tickets to those attending the meeting who travel over the Southern Pacific system; and this applies not only to members, but to their families, and to any regular physician attending the meeting. These rebate certificates will be distributed to members early in March, and others may obtain them by addressing Chas. C. Wadsworth, 606 Sutter street, San Francisco. The social features, which during the last two meetings have proved so enjoyable, will again form a part of the programme. Applications for membership must be sent to J. H. Wythe, Oakland, Chairman of the Board of Censors, accompanied by a fee of \$7. Wm. Watt Kerr, Secretary, 600 Sutter street, San Francisco.

The New Commitment Blank for Insane.

At the last meeting of the Association of Medical Officers and Boards of Managers of California Asylums a new commitment blank was adopted. This has now been issued, though it has hardly been in use for a sufficient time to show whether better results can be obtained. The fault in the present system of examination lies principally with the Medical Examiners, who should be properly qualified. In the larger cities and towns their selection by judge or sheriff is usually a matter of personal or political bias, regardless of fitness. In smaller places the examiners may be the only ones available. In many places but little pains have been taken in making the examination, and the great majority of commitment papers reaching the asylums give little or no information as to the personal and family history of the patients examined. While this cannot always be had it could certainly be provided in a much larger

percentage of cases. The mental symptoms are also not carefully presented, and questions not put singly are evaded, the examination being, apparently, conducted in a hurried manner. The new commitment blank asks but few questions regarding the physical condition of the person examined, but it is desirable as thorough a physical examination as possible may be made. Several questions have also been singled out so as to furnish no excuse for not answering them. All the old blanks have been called in and the information now received will be uniform, thus making the records of the asylum more available for statistical purposes.

A Suspicious Death from Poisoning by Lye.

In the southern part of San Francisco, back of Mission Bay, is quite an extensive marsh, drained by several sloughs. Upon this marsh are situated a number of soap, candle and glycerine factories, the refuse, offal and lye from which are dumped into the sloughs. At about 9 o'clock on the morning of February 10th, Denis Wheelan, aged 67, started across the marsh, following a well-traveled wagon road. Soon after several men working in the neighboring factories heard cries coming from the direction of a bridge which crossed one of the small sloughs. On hastening to the spot, Wheelan was seen floundering about in the mud and slime of the slough, and screaming, evidently in pain. He was dragged out, the police patrol wagon summoned, and therein he was conveyed to the Receiving Hospital. He suffered great agony and died in a few hours, in spite of everything that could be done for his relief. The friends of the deceased waived an inquest, and consequently no *post-mortem* examination was made. The cause of death was probably the poisonous effects of the lye swallowed while submerged. Except a few scratches there were no lesions on the surface of the body, but the eyes showed a grayish opacity. Just how the accident occurred will probably never be known. The bridge from which he fell is fully twelve feet wide, and but two or three feet above the surface of the water. The stream is perhaps fourteen feet in width, for the most part shallow and with a firm bed. Next to one of the banks, however, the water is stagnant, contains a quantity of accumulated lye, and has a soft muddy bottom, but even here the water would not reach much above the man's waist. The man's friends declared he was not intoxicated at the time, which, if true, envelopes the case in considerable mystery.

SPECIAL ARTICLE.**THE CASE OF FLORENCE MAYBRICK.**

On July 31, 1889, and following days, Florence Elizabeth Maybrick was tried at the Liverpool Assizes, before Mr. Justice Stephen, "for having, at Garston, on the 11th of May, 1889, feloniously, wilfully, and of her malice aforethought killed and murdered one James Maybrick." The prosecution contended that James Maybrick died from the effects of arsenic administered by the prisoner. The general history of the case, it was urged, presented abundance of motive for the act. The defence contended that the history of the case pointed away from arsenic as the cause of the deceased's death. It was urged that unless it was proved that James Maybrick died of arsenic, the question of motive was immaterial. On Wednesday, August 7th (the trial having lasted seven days), the prisoner was found guilty, and sentenced to death. The Home Secretary advised Her Majesty to commute the capital sentence to penal servitude for life, "inasmuch, as although the evidence leads clearly to the conclusion that the prisoner administered and attempted to administer arsenic with intent to murder, yet it does not wholly exclude a reasonable doubt whether his (James Maybrick's) death was in fact caused by the administration of arsenic.

This case at the time excited very general interest, particularly in the United States, the defendant being an American of Southern birth. It was felt that the evidence upon which a conviction was sought was mainly circumstantial, and even then by no means positive. Great weight was also attached to ulterior motives, which in law could not have concerned the issue, and these "motives" were allowed to influence the jury. A calmer review of the trial and the facts connected therewith have served, in the minds of many, to increase the "reasonable doubt" that led the Home Secretary to recommend a commutation. Quite recently efforts have been made looking to the ultimate release of the prisoner. A virtual rehearing was sought under a suit to compel the payment of a policy of insurance which had been refused, but the expected result was not obtained. In view of the possibility that this unfortunate woman may be innocent of the crime of which she has been convicted, it seems advisable to give the medical evidence supporting this claim. We are indebted to Mr. Rawdon Macnamara, of Dublin, who, with Dr. Charles M. Tidy, gave expert testimony in the case, for the following facts, which are taken from "A Toxicological Study" of the case, published under their joint authorship. These gentlemen, of whose position as authorities there can be no question, arrived at the deliberate conclusion that "the death of James Maybrick was not caused by arsenic."

The following are the usual symptoms of arsenical poisoning contrasted with those from which Maybrick suffered:

ARSENICAL POISONING.

Countenance tells of severe suffering.
 Very great depression an early symptom.
 Fire-burning pain in stomach.
 Pain in stomach increased on pressure.
 Violent and uncontrollable vomiting, independent of ingesta.
 Vomiting not relieved by such treatment as was used in Mr. Maybrick's case.

MR. MAYBRICK'S CASE.

Not so described.
 Not present until towards the end.
 Not present.
 Pressure produced no pain.
 "Hawking rather than vomiting;" irritability of stomach increased by ingesta.
 Vomiting controlled by treatment.

During vomiting burning heat and constriction felt in throat.	Not present.
Blood frequently present in vomited and purged matter.	Not present.
Intensely painful cramps in calves of the legs.	Not present.
Pain in urinating.	Not present.
Purging and tenesmus an early symptom.	Not present until twelfth day of illness, and then once only.
Great intolerance of light.	Not present.
Eyes suffused and smarting.	Not present.
Eye-balls inflamed and reddened.	Not present.
Eye-lids intensely itchy.	Not present.
Rapid and painful respiration an early symptom.	Not present.
Pulse small, frequent, irregular and imperceptible from the outset.	Not so described until approach of death.
Arsenic easily detected in urine and feces.	Not detected, although looked for.
Tongue fiery red in its entirety, or fiery red at tip and margins, and foul towards base.	Tongue not red; "simply filthy."
Early and remarkable reduction of temperature generally.	Temperature normal up to day preceding death.

Considerable stress was laid upon the fact that Maybrick constantly complained of the sensation of a hair in his throat, and it was implied that this was one of the characteristics of arsenical poisoning. One of the witnesses, however, who had had considerable experience in the employment of arsenic therapeutically, deposed that he never met such a symptom in any case, even where the arsenic had been pressed to the point of saturation. On the other hand, he had frequently heard it complained of by patients who had never taken a single dose of arsenic.

The four most characteristic symptoms of arsenical poisoning are: (1) Intense pain, first in the pit of the stomach, but gradually spreading over the entire abdomen, the pain being greatly increased by pressure. (2) Excessive vomiting. (3) Excessive diarrhea. (4) Cramps in the calves of the legs. There are two others, peculiarly characteristic of arsenic where the interval between the ingestion of the poison and the death is at all prolonged, viz: (5) Tarsal irritation, with suffusion of eyes, and more or less intolerance of light. (6) A peculiar eruption (eczema arsenicale). The two latter symptoms were admittedly absent in Maybrick's case. Admitting the theory of the prosecution that the patient died from poisonous doses of arsenic *administered sometime previously*, the absolute absence of these two symptoms becomes material. That it is usual to have excessive vomiting and purging in arsenical poisoning will not be disputed. The following evidence of the attending physicians shows whether the symptoms present were of the nature and extent characteristic of arsenical poisoning:

Dr. Humphreys (the general practitioner in charge of the case, was called on the 28th of April. The symptoms he found from this date to May 3d are recorded with scrupulous minuteness, but no reference of any kind is made to the presence of vomiting or diarrhea. On midnight of May 3d-4th Dr. Humphreys was sent for, when Maybrick complained "of having been sick twice since his return from his office." "I don't remember," says Dr. Humphreys, "any traces of sickness." He complained of pain in the thighs, for which Dr. Humphreys administered a morphine suppository. On the 4th his pain had disappeared, but he was sick. On the 5th Dr. Humphreys found him better, and adds, "What he did was *hawking more than vomiting*." This stoppage of the

vomiting appears to have resulted from a blister Dr. Humphreys applied to the pit of the stomach. On the 7th Dr. Humphreys found him "able to retain a good deal of fluid food without being sick."

There are here certain facts: (1) Dr. Humphreys had no suspicion that Maybrick's symptoms were due to arsenic. "He did not form any opinion that the deceased was suffering from the effects of an irritant poison until the suggestion was made to him, the symptoms being consistent (in his opinion) with congestion of the stomach, not necessarily caused by an irritant poison." (2) Between April 27th and May 7th Maybrick complained of sickness, but Dr. Humphreys never seems to have seen vomiting "violent and uncontrollable," so characteristic of arsenical poisoning, describing his own personal observation of the patient's sickness as "hawking rather than vomiting." (3) Between April 27th and May 7th there is no reference whatsoever to diarrhea. From May 8th there were three nurses in attendance, not one of whom ever mentions diarrhea, either at the Coroner's or Magistrate's inquiry, as having taken place during the time they were on duty.

Dr. Carter, who was called in consultation on May 7th, says, "Maybrick told me that he had been suffering from vomiting and diarrhea for some days." He corrected this statement at the trial by saying that "diarrhea was just appearing." The nurses never mention diarrhea, nor, indeed, sickness, except possibly on one occasion. Excepting "looseness of the bowels" (not diarrhea) on the night of the 8th, Dr. Humphreys records neither diarrhea nor even sickness after May 7th. Of Dr. Carter's statement, therefore (which admittedly is only what the patient told him), there is no confirmation whatsoever.

Dr. Carter's view of the case may be judged from the following two remarkable circumstances: (1) On the 7th he ordered (a) antipyrin, (b) tincture of jaborandi, and (c) chlorine water with which to rinse the mouth. (2) On the 9th Dr. Carter paid a second visit, and again a third visit on Friday (the day before patient's death) on which latter occasion he prescribed (a) a nutrient suppository, (b) sulphonal, and (c) a nitroglycerine tablet. Certainly jaborandi, antipyrin, sulphonal, and a nitroglycerine tablet are scarcely the drugs that commend themselves in a case where a patient is dying from the effects of arsenic. The conclusion is irresistible. Dr. Carter (whose professional ability stands very high) did not up to the very end, even on the 9th, believe that Maybrick's symptoms indicated or even pointed to arsenic. Dr. Carter was too accurate an observer in such a case not to examine the urine, knowing that this would practically settle the diagnosis, and confirm or dispose of "the suggestion" which had been made to him. Dr. Humphreys, therefore, on Wednesday, May 8th, at Dr. Carter's request, examined the urine and the feces for arsenic, and found none.

But a far more remarkable circumstance has to be noted. On Friday (the day before Maybrick's death) Dr. Carter took a bottle of meat juice from the room of the patient. He states that *he examined the meat juice on the same day* (Friday), and found by Reinsch's test that it yielded a steel gray deposit, indicative of arsenic. Dr. Carter evidently attached little or no importance to this discovery, allowing the patient to continue the sulphonal and the nitroglycerine tablets which he had prescribed the day before, and, so far as the evidence shows, never breathes one word or suggestion as to the results of his analysis until the time of his prearranged visit on Saturday at 11:30. Why all this delay. There is only one possible answer. Dr. Carter did not think (and the

authors agree with him) that his discovery of what was manifestly arsenic in the meat juice had the slightest relationship to Maybrick's symptoms.

These, then, are the symptoms on which the medical witnesses for the prosecution ventured to say that arsenic had been administered. Everything, it would seem, was present that ought to be absent, and was absent that ought to have been present, were it a case of arsenical poisoning. The witnesses for the defence were in very truth justified in saying that, regarding Maybrick's symptoms by themselves, they pointed away from arsenic as the cause of the fatal illness, and in arriving at the following facts: (1) Maybrick's symptoms are as unlike poisoning by arsenic as it is possible for a case of dyspepsia to be. Everything distinctive of arsenic is absent. The urine or feces contain no arsenic. The symptoms are not even consistent with arsenical poisoning. (2) Regarding the treatment adopted by the medical men, and more especially Dr. Carter's action with regard to the meat juice, it is justifiable to assume that the doctors themselves, even after a certain suggestion had been made to them, did not come to the conclusion that the illness of Maybrick was the result of arsenic.

The autopsy was made on Monday, May 13th, by Drs. Humphreys, Carter, and Barron. We take the following from Dr. Humphreys' statement before the Coroner: The bowels that were exposed, by drawing aside the abdominal walls, had a rosy flush here and there, and some portion of the bowels appeared a very dark blue, with the vessels seeming to run distinctly over this blue intestine. The stomach, which was tied at each end and taken out with its contents, contained some dark, chocolate-like fluid. This was put into a bottle. On the stomach being opened, we found that its larger end was red (rose red), and here and there amongst this large patch was a darker spot, which, after cutting through it, showed to be a little blood clot. Then between this and the other end was a clean surface, without any redness at all; but between this surface and the pyloric end was another area of redness. The other side of the pyloric end, after going through a portion on the duodenum, showed that this redness continued in a transverse direction, and this extended three feet along the bowel. About twenty feet lower down, and extending for about two feet, there was a patch with another area of redness, but not so marked as those seen higher up. The gullet, the tongue, and the upper portion of the gullet were taken out and examined. The tongue was dirty and blackish. On the larynx there was nothing noticeable. Upon the upper portion of the epiglottis and on its posterior aspect there was a little area of redness about the size of a pin's head—a pretty good sized pin's head. There was a small, very minute ulcer here—very shallow indeed, and a large portion of the epiglottis was eroded and rough, and this extended up to the free margin of the epiglottis. A little lower down were also seen two little red spots upon each side of the larynx, and also upon the posterior surface of the cricoid cartilage; also a small area of redness. The rest of the gullet seemed natural for some way until we came to where the division of the bronchial tubes takes place. Here the mucous membrane was swollen, more or less yellowish, and not unlike a frog's spawn in appearance and consistence.

A well-marked peculiarity to be noted in cases of arsenical poisoning is the dotted and petechious condition of the internal membranes. No mention is made of this in the notes of the autopsy, but two months later Dr. Humphreys speaks of a dotted condition of the stomach, the dots appearing like flea

bites. Dr. Carter does not refer to petechiæ in his evidence, and, indeed, says, "he has no note of such condition." Dr. Barron, an experienced and accomplished pathologist, says he did not see the petechiæ, and that had they been there, they would have been entered on the notes. It is true, Dr. Humphreys candidly states that he never mentioned petechiæ before the trial, and on cross-examination frankly admitted that what he observed were not spots, but "*lines*" ("marks of a line-like character"). The facts are certain—the stomach was congested, but there were no petechiæ. A somewhat characteristic appearance of arsenical poisoning, though by no means peculiar to arsenic, and far less distinctive than the petechiæ on the stomach, but possessing in the Maybrick case a special importance, is fatty changes in the viscera where some considerable interval has elapsed between the administration of the poison and the death. Dr. Carter fixes May 3d as the day on which the fatal dose of arsenic had been administered. Maybrick died on the 11th. This gives an interval of seven days. The absence of such changes, considering the frequency with which such conditions occur under the special circumstances of the case, is worthy of record. Reviewing, then, the *post-mortem* appearances it is concluded: (1) That the appearances, and the only appearances, distinctive of arsenical poisoning are absent. (2) That the appearances point to gastritis or gastroenteritis as the cause of death. It may be asked, What caused the inflammation? An answer of Dr. Carter's, given before the Coroner, may explain this. "Q.—Had you any reason to suppose he had taken poison until your attention had been called to it? A.—He must have taken something. It might be the food at the race dinner, and that something set up gastritis."

In connection with the analysis the following facts are not disputed: (1) (a) The tissue of the stomach, (b) the contents of the stomach, (c) the heart, (d) the lungs, (e) the spleen, (f) the bones, (g) the fluid from the mouth, (h) the bile, were severally examined for arsenic, and none found. (2) Davies found minute traces of arsenic, "which were not weighable," in the kidneys. Stevenson also obtained evidence of arsenic from 1 oz. of kidney. (3) Davies found unweighable traces of arsenic in the intestines. Stevenson found that 8 ozs. of intestines yielded 0.015 gr. of As_2O_3 . (4) Liver. Both Davies and Stevenson found arsenic in the liver. [The weight of the liver was 48 ozs.] Davies, from 2 ozs., could not get a weighable quantity of As_2O_3 . Davies, from 6 ozs., obtained 0.016 gr. of As_2O_3 . Stevenson, from 4 ozs., obtained 0.026 gr. of As_2O_3 . Stevenson, from 8 ozs., obtained 0.046 gr. of As_2O_3 . (5) The total quantity of arsenic, therefore, recovered from the body on analysis was 0.103 gr. Two grains of arsenic is the smallest quantity necessary to kill; the analysis had only found one-tenth of a grain, or the twentieth part of the smallest fatal dose. Dr. Stevenson, a witness for the prosecution, argues in substance as follows: (1) "I found 0.015 grs. of As_2O_3 in 8 ozs. of intestines. [There is no record as to what part of the intestines he examined.] I have weighed the intestines of some other person (not Maybrick's), and find their entire weight to be so much. If, then, 8 ozs. of Maybrick's intestines yield 0.015 gr., the entire intestines (calculated from the weight of someone else's intestines), had I analyzed them, would have yielded one-eleventh of a grain. (2) I found 0.026 gr. of As_2O_3 in 4 ozs. of liver. The entire liver weighed 48 ozs. Therefore, the entire liver contained 0.32 gr. of As_2O_3 . (3) The intestines and liver, therefore, together may be taken to contain four-tenths of a grain of arsenic. But, having found four-tenths of a grain, I am justified in assuming that 'the body at the time of death probably contained a fatal dose of arsenic.'"

The whole of this extraordinary line of argument rests on the assumption that the arsenic was equally distributed in the intestines and the liver. The fact that arsenic may be found in one portion of the intestines, and not a trace in any other part, is within the personal experience of the authors. That in arsenical poisoning the arsenic may be found in the rectum, or in the duodenum, and in no other part, is indisputable. The fact of the extremely unequal distribution of arsenic in the liver after death from arsenic, whatever may be the precise explanation, is beyond all question. In examining the evidence of the witnesses of the prosecution, however, it appears that they indirectly prove this unequal distribution of arsenic in the liver: (1) Davies calculates the quantity of As_2O_3 in the whole liver, as = 0.130 gr. (2) Stevenson calculates the quantity of As_2O_3 in the whole liver as = 0.312 gr. (1st experiment). (3) Stevenson calculates the quantity of As_2O_3 in the whole liver, as = 0.278 gr. (2d experiment). In other words, Stevenson finds double in one experiment, and considerably more than double in a second experiment the quantity found by Davies.

Dr. Stevenson explains to the Court that he did not take merely one piece of the liver, but that he cut off a dozen or more little bits of liver from different parts of the viscus upon which to conduct his analysis, thereby admitting unequal distribution. Hence his care to cut little bits off different parts. But this was insufficient for the purpose, to cut a bit off here and there, is not the way to obtain accurate data. One of the authors has recorded a case of arsenical poisoning, where, in a liver weighing 52 ozs., 10 ozs. yielded 0.5 grain of arsenic, whilst the analysis of the whole liver only yielded 1 grain. Perhaps the total quantity of arsenic in Maybrick's liver was under-estimated. Be it so;—but at least the defence were justified in assuming its over-estimation. Dr. Stevenson says: "These results [that is the recovered one-tenth of a grain, which by multiplication can be made four-tenths] shows that there was approximately a possible fatal dose of arsenic in the deceased's body at the time of death." And again these results show "that at the time of death the body probably contained a fatal dose of arsenic." Every part of the body had been examined—urine, bile, stomach, contents of stomach, heart, lungs, spleen, fluid from mouth and even bones, and no arsenic found in any of them. Nevertheless Dr. Stevenson says, "My results show that a fatal dose of arsenic was present in the body at the time of death."

Reviewing the case: A man dies of symptoms admittedly more or less those of gastritis—the *post-mortem* appearances are those of gastro-intestinal irritation—arsenic is found on analysis. Is it justifiable to assume some connection between the arsenic found and the gastro-enteritis, of which the deceased died? The authors consider there is abundant reason to answer this question in the negative. James Maybrick was essentially a hypochondriac and a "medicine lover." He was constantly complaining of dyspepsia, of deranged digestion (stomach and liver), and of nervous symptoms, which the doctors thought exaggerated. Nervine tonics were the common medicines his physicians ordered. It was abundantly proved that not only did he constantly take the medicines prescribed for him, but that he was "given to dosing himself." That he also took actively poisonous drugs, was proved by the evidence of Sir James Poole, Dr. Hopper, and others. That these medicines sometimes contained arsenic, was conclusively proved. Dr. Hopper says, "Maybrick knew arsenic as an antiperiodic." In the drawer of the deceased's workstand, pills or capsules were found (prepared by Taylor Bros., pharmaceutical chemists, of Norfolk,

Va.), containing arsenic—(Evidence of E. Maybrick). It is worthy of note that the medicine analyzed (and upon which the prosecution laid much stress) merely contained medicinal doses of arsenic, whilst the glycerine (upon which stress was also laid) only contained such traces of arsenic as are not uncommonly found as an impurity in glycerine. That Maybrick took arsenic was proved by the evidence of Nicholas Bateson, a friend of Maybrick's in the United States, who says he "took arsenic and strychnine in 1877, by order of Dr. Ward, for three months, to my knowledge;" by Thomas Stansell, Maybrick's servant in America, who had on several occasions fetched him arsenic, and seen him take it in his beef-tea, and by the evidence of Edwin Garnett Heaton, a retired Liverpool chemist, who speaks to having supplied Maybrick from two to five times daily with "picks-me-up," into which he had put, by his direction, liquor arsenicalis, in gradually increasing doses.

Much more evidence might be adduced to prove: (1) That Maybrick had suffered for a long period from symptoms associated with deranged stomach and liver. (2) That he was in the habit of taking excessive doses of medicines, and often times medicines other than those ordered by his medical directors. (3) That of these medicines arsenic was one.

Admitting these three points of evidence, two questions arise: (1) Can the death of Maybrick be explained otherwise than by the effects of arsenic? (2) Can the presence of one-tenth of a grain of arsenic in the body be explained otherwise than by criminal introduction? On the first point much has been, and little more need be, said respecting Maybrick's symptoms. Maybrick was a dyspeptic, given to over-dosing himself, and to taking poisonous medicines of his own accord. On the 27th of April he goes to the races, gets wet on the race course and attends a race dinner, at which he was taken ill (Humphreys), and has as the result symptoms of gastritis, the stomach after death presenting the appearance of inflammation.

Dr. Humphreys (with emphasis) states he did not suspect an irritant poison until it was suggested to him. "The symptoms (he says) were consistent with an acute congestion of the stomach. Had it not been (he says) for the suggestion of arsenic, he was prepared to give a certificate of death if he died on Wednesday." And again: "If nothing about poisons had been suggested, I should have certified that he had died of gastritis or gastro-enteritis." And again: "The *post-mortem* appearances were consistent with congestion of the stomach, not necessarily caused by an irritant poison." Dr. Carter, too, admits that he formed no opinion that the symptoms were due to poison before it was suggested to him. His words are definite: "I thought from this account I heard of his dining at Wirral races * * that he must have taken some irritant wine, or decomposed food, or that there had been some very grave error of diet. * * I stated that I thought something had occurred, accidental no doubt—it was not disease *per se*, but I thought he had taken something that had caused all this. * * It might be bad tinned meat that he had partaken of at a race dinner—not a discreet dinner; and perhaps wine had entered into it." "From the *post-mortem* examination he came to the conclusion there must have been an irritant of some kind."

The authors agree with Drs. Humphreys and Carter: (a) That the symptoms were those produced by an irritant (although not indicative of arsenic). (b) That the *post-mortem* appearances were those of inflammation (but not consistent with arsenical poisoning).

Up to the time of death Drs. Carter and Humphreys are mutually consistent in their treatment and mode of action. They do not think it worth while to examine the urine, which would have set the question at rest, save on one occasion, when they found nothing. Nor do they attempt any special antidotal treatment, seeing there was nothing to indicate such remedies being required. They would have given a certificate of death but for a certain suggestion that had been made to them. Subsequently one-tenth of a grain of arsenic is discovered, and the whole case is altered to their minds.

Here two facts arise: (1) That only one-twentieth part of the smallest recorded fatal dose of arsenic was discovered. (2) That Maybrick had himself taken arsenic for his many (real and fancied) ailments. The authors, from personal experience, refer to two cases where arsenic was given medicinally: (a) In one where it was given for three months before death, 0.2 gr. was found in the liver. (b) In a second case, where it was given for five months preceding death, 0.174 gr. of arsenious acid was found in the liver after death. There was no indication in either case that death had resulted from any other cause than the disease (phthisis). And further, a man may commence taking arsenic in January, take it continuously for four months (until May), and on his death seven months afterwards (of albuminuria), arsenic be found in appreciable quantity in the liver, although no arsenic was administered during the seven months preceding death.

The authors conclude: (1) That the arsenic found in Maybrick's body may have been taken in merely medicinal doses, and that probably it was so taken. (2) That the arsenic may have been taken a considerable time before either his death or illness, and that probably it was so taken. (3) That the symptoms from which Maybrick suffered are consistent with any form of acute dyspepsia, but that they absolutely point away from, rather than towards, arsenic as the cause of such dyspeptic condition. (4) That the *post-mortem* appearances are indicative of inflammation, but that they emphatically point away from arsenic as the cause of death. (5) That the analysis fails to find more than one-twentieth part of a fatal dose of arsenic, and that the quantity so found is perfectly consistent with its medicinal ingestion.

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting, January 19, 1892.

The President, J. H. PARKINSON, in the Chair.

Compulsory Notification of Contagious Diseases by Physicians Under Penalty and Without Compensation.—The committee upon this question having failed to make a report was, on motion, discharged.

DR. G. L. SIMMONS said that as quite a number of the members were opposed to the discharge of the committee, some action of the Society upon the original question seemed necessary; he therefore offered the following resolution:

Resolved, That for the better protection of the community from contagious or infectious disease, or the householder in whose house the case may be situated, or infectious diseases, the parent or guardian of children having a contagious shall be required to report the presence of said contagious or infectious disease to the Health Officer.

The speaker said that in hotels and boarding-houses, where there were cases of contagious disease, he had known the mother undertake to carry the child through the illness without calling in a physician, because it was not desired to

have the house placarded by the sanitary authorities. Had the responsibility of notification rested on the shoulders of the parents they would not have been so likely to evade the ordinance. Such a state of things did not tend to the better protection of the community.

DR. C. B. NICHOLS said that an ordinance was already in force making the parent equally responsible with the medical attendant in notifying the disease. A penalty was also attached.

THE PRESIDENT said that as the ordinance requiring the parent to report had not been enforced by the Health Officer, and the physician, only, had been held responsible, it was useless. The public did not understand that they had any responsibility in the matter. What was now desired was to place the responsibility where it properly belonged—solely upon those directly interested in the matter.

DR. J. R. LAINE said there were two reasons why the resolution should not prevail: (1) The householder was not an expert to decide whether or not the disease was contagious. (2) The resolution was in direct conflict with the organic law of the State prohibiting class legislation in favor of one set of persons.

DR. W. A. BRIGGS favored the resolution which the argument of the last speaker supported. As the matter now stood it was class legislation against the physician. If an ordinance making the householder responsible were enforced no one could object. He protested emphatically against any law compelling him to give his time gratuitously to the State. Such services should only be required when needed to uphold the moral law.

DR. T. W. HUNTINGTON: As I understand the present ordinance, notification is required either from the physician or the householder. The medical attendant should not be required to report the case at all; he should occupy the position of any other disinterested person.

The resolution was then adopted (12 to 5).

DR. T. W. HUNTINGTON then offered the following resolution, which was adopted:

Resolved, That it is the sense of this Society that births be reported to the Health Officer by the parent or guardian of the child.

THE PRESIDENT, for Dr. T. B. Eagle, of Folsom, reported a case of "Removal of a Submaxillary Calculus, weighing 18 drachms, avoirdupois," and exhibited the specimen.

DR. G. L. SIMMONS, JR., read a paper on "The Sequelæ of Influenza" (published at page 120).

DR. G. L. SIMMONS: In examining the lungs of persons who had had influenza had frequently found solidified portions, which in time would break down with purulent expectoration. He believed that this condition was materially assisted by the use of the coal tar derivatives which, particularly in old people, produced a devitalized condition of the system. All of these products are, to a certain extent, poisonous, and where the patient was over 40 years of age they should be given very guardedly.

DR. T. W. HUNTINGTON said that we had much to learn regarding the pathology of "la grippe." Many of the sequelæ were undoubtedly due to a profound disturbance of the central and peripheral nervous system.

DR. F. R. WAGGONER had not observed any ill effects following the use of phenacetine and antikamnia, the latter of which had acted more rapidly in relieving pain than anything else.

DR. H. L. NICHOLS had noticed in several cases an edema of the feet and ankles, not associated with any renal disturbance. It yielded readily to appropriate remedies. In the general treatment of the disease he had found quinine and Dover's powder sufficiently efficacious to lead him to adhere to them.

DR. J. R. LAINE thought that in many cases there was a latent condition of disease in the system upon which the influenza fastened. He had often observed, after an attack, coarse rales in the lungs. He had noticed the prevalence of a higher temperature in children than in adults. The vitality of patients was always lowered in these epidemics, though that condition was common to epidemics of other diseases.

THE PRESIDENT remarked the great tendency in epidemic influenza to the production of suppurative troubles. This was best shown in inflammations of the middle ear. While many of these cases were recent, there were on the

other hand a number of "old ears" that had not discharged even for years; yet the occurrence of influenza had produced fresh trouble. During the present epidemic he had found a greater tendency to pulmonary sequelæ, whilst those connected with the nervous system were not so prominent. Regarding the temperature, he had seen a case in the epidemic of 1890, in which the temperature rose to 107° F., and remained at that point for over 12 hours. The patient was a man aged 25 years. The only complication was an obstinate pleurodynia without any complication, and the point of interest was that the patient did not present any symptoms indicative of abnormal temperature.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, January 12, 1892.

The President, D. W. MONTGOMERY, M. D., in the Chair.

New Members.—W. S. HEREFORD, M. D., and R. B. DAVY, M. D., were duly elected members of the Society.

DR. H. KREUTZMANN read a paper on "Puerperal Fever from Self-infection."

DR. W. H. MAYS agreed with the author that the term "self-infection" should be abolished. There were three causes of infection: (1) The placental site when coagula appear, and from decomposition we have peritonitis due to sepsis. (2) Sepsis from absorption through a lacerated cervix, which is quite frequent, as very few primiparæ escape. (3) When the perineum is ruptured, though this is not so serious. He fully agreed with the author as to treatment. In the douche he preferred a solution of carbolic acid with the use of iodoform gauze as a bolus or plug. He thought that alcohol was very necessary in the treatment of puerperal fever.

DR. C. E. FARNUM regarded puerperal fever as rather rare. His method was to curette and paint the uterus with iodine, using Skeen's dull curette. The results have been very satisfactory.

DR. F. B. CARPENTER said Dr. Farnum's treatment seemed rather severe, but he had found the introduction of a rubber drainage tube to the fundus, and washing out with a bichloride solution, 1:2000 of advantage. He thought that the introduction of air when the placenta is removed may be the cause of many cases.

DR. B. F. CLARK said that he had been unfortunate in meeting a number of cases within the past 15 years. He thought the origin was in erysipelas or some other disease. His treatment had always been antiseptic.

DR. J. F. MORSE would ask, What is "puerperal fever?" If puerperal fever is simply septicemia what is the use of vaginal injections of weak solutions of bichloride of mercury, carbolic acid, or tincture of iodine, which is unfit to use on any open wound?

DR. G. F. SHIELS suggested that the time had arrived when every married man should have a room in his house prepared upon the modern antiseptic theory, with tiled floors and ceilings, iron bedstead, wire mattress, and in fact all the modern antiseptic conditions; that the wife, a few days before confinement, should be conducted to the room, washed and scrubbed with bichloride; the hair shaved from the pubes that there might be no chance for infection; that the nurse should be treated in the same careful manner, and that no other person should be allowed to approach the woman until she had fully recovered from her confinement.

DR. G. W. DAVIS thought it wonderful that so many cases were reported by some writers; the reason for this he could not comprehend. He was in doubt as to whether such a thing as auto-infection existed, but was rather inclined to believe that such a condition was possible. Even when every precaution had been used cases do occur. He believed that ptomaines in the womb may produce self-infection.

DR. KREUTZMANN, in replying, said he did not think that it was possible for a person to carry the germs of infection within them.

Entertainment of the State Society.—The question of entertaining the State Medical Society having been discussed, the following committee, being the Com-

mittee of Arrangements of the State Society, was appointed to also act for the local Society: W. W. Kerr, James Simpson, P. H. Bailhache, Geo. W. Merrit, M. Regensburger.

The Therapeutic Uses of Oxygen.—DR. S. S. WALLIAN, of New York, read a paper upon this subject. He said the therapeutic uses of oxygen have been recognized for many years, but until lately the results obtained have not been satisfactory owing to the very impure quality of the gas, and furnished no criterion of what might be accomplished. Thus when oxygen was obtained through the decomposition by heat of oxide of mercury, ptyalism not infrequently followed its inhalation owing to the presence of sublimed mercury. The speaker was satisfied that nearly all the objections offered against its use might be traced either to lack of purity in the gas or a want of appreciation of its peculiar condition when employed irrespective of purity. The following points are of vital importance in connection with the administration of oxygen: (1) The usual method of generating oxygen is by the application of heat to a mixture of chlorate of potassium and dioxide of manganese in a retort. Frequently cheap and impure grades of these chemicals are used. (2) The purification of the gas is usually conducted in a careless manner by simply passing it through a single solution of caustic potash or soda. This removes the hypochlorous acid, and intercepts a portion of the free chlorine. Sometimes several wash bottles are used, the additional ones being provided with water, which fails to remove various impurities. Sometimes portions of the chlorate, sublimed by heat, will pass through all the wash bottles remaining in the gas to give it a pungent taste and odor and render it unfit for respiration. Most of the compressed gas in the market is washed in this slovenly way. (3) To be medicinally perfect the gas should be washed through not less than two solutions of caustic soda or sodium hydroxide, and two solutions of nitrate of silver, for one of which lime water may be substituted. Finally the gas should be passed through a bottle closely packed with dry absorbent cotton, which effectually intercepts the sublimed crystals of chlorate. When compressed gas is used, it is a sensible precaution to put it through a similar process. (4) Fresh or nascent oxygen is decidedly more effective than ordinary or passive oxygen, it being necessary to use four or five times as much of the latter as the former to accomplish the same results. The combining affinity of the nascent gas is probably ten times as strong as that of the passive. It must, therefore, be freshly prepared. The passive oxygen may be improved or slightly ozonized by being passed through a strong solution of peroxide of hydrogen. (5) Faraday has shown that oxygen is magnetic, and that its magnetism is more or less disturbed by contact either with metallic or organic substances stands to reason. Oxygen in its active state is 600 times as magnetic as nitrogen, and 1,750 times as magnetic as hydrogen. (6) Richardson and others have shown that in warm blooded animals 25 per cent. of the oxygen inhaled is absorbed, and 75 per cent. exhaled. On collecting the exhaled portion and carefully purifying it from all traces of ammonia or carbonic acid, so that it was chemically pure, it was found to be incapable of supporting warm blooded animal life, and animals immersed in it died as if suffocated in hydrogen or other irrespirable gases. (7) Brereton Baker has demonstrated that absolutely dry or anhydrous oxygen is wholly devoid of combining intensity. Thus charcoal, which burns with such brilliancy in ordinary oxygen, can be heated to redness in desiccated oxygen without showing any tendency to further combustion, and sulphur can be sublimed without igniting. Finally, it is evident that we know but little of the therapeutic possibilities involved in a thorough study of this widely distributed, active, and potent element.

CALIFORNIA ACADEMY OF MEDICINE.

Regular Meeting, December 21, 1891.

LUKE ROBINSON, M. D., in the Chair.

Cases of Head Injury.—DR. O. G. MILLER reported the following cases:
Case I.—M. G——, a German by birth, 35 years of age, was taken to the German Hospital October 27, 1891. He is the proprietor of a sawmill, and while inspecting some machinery was struck by a piece of a log on the forehead.

The blow had crushed in the entire right side of the frontal bone. Considerable hemorrhage had taken place, and brain substance covered the outer surface of the forehead. In order to thoroughly expose all parts of the injury, I dissected off large flaps and removed a number of sequestra, among them the entire supraorbital ridge, including the lachrymal fossa. Some smaller fragments had been driven deeply into the right frontal lobe, and could be located by my left index. I succeeded in extracting them with a pair of forceps. Detached pieces of brain substance and such tissue as was hanging by shreds was removed from the wound. The loss of brain substance proper was about an ounce. The wound was irrigated with a sublimate solution 1:1000, and a sublimate dressing applied. The patient's temperature remained absolutely normal throughout the entire process of repair. One day while he lay upon the operating table to have his wound dressed, I happened to insert the nozzle of the irrigator rather deeply into the brain substance. This procedure was followed by a slight bilateral epileptiform convulsion, which lasted but a moment. No such symptoms have manifested themselves since. The patient was discharged cured on December 8th. He is in excellent health now, and perfectly able to attend to the usual routine of his business. You will, however, still notice [patient exhibited] a small fistulous tract, which I think is due solely to a few remaining spiculæ of bone. The secretion is semi purulent, and is constantly diminishing. Vision on the injured side is impaired to some extent, and the patient complains of being double sighted with this eye at times. Dr. Rumbold, who kindly offered to examine the patient's eye, informs me that the retina is in an inflamed condition, and that he thought it wise not to produce further irritation by a more thorough examination of the patient's eye.

Case II.—M. H—, a negro, 34 years old, admitted to the German Hospital July 14, 1891. He was suffering from what appeared to be an incised, somewhat irregular scalp wound $1\frac{1}{2}$ inches in length, beginning immediately above the right supraorbital ridge and extending horizontally towards the epicranium. This wound had been closed by sutures. The patient came from Lake Tahoe, and stated that a day previous he was thrown off a horse and kicked by the animal on the forehead which rendered him unconscious. Although he complained of comparatively little pain, I deemed it wise to further investigate, especially as the wound appeared to be an infected one. I removed the sutures, separated the edges, and by digital examination discovered a compound fracture of the skull. I decided to operate at once, and laying the parts wide open, removed a depressed fragment about the size of a half dollar. Further fragments consisted of the supraorbital ridge, including the lachrymal fossa, and a number of smaller fragments of bone. The membranes were also in a torn condition, yet no brain substance was lost. The wound was irrigated with a sublimate solution 1:1000, and a sublimate dressing applied. The patient's temperature rose to 101.5° F. that evening, yet some elevation of temperature must have existed before the operation was performed. In the morning his temperature was 100.3° , and declined further until on the fourth day a normal temperature was registered. The process of repair was uninterrupted. On August 6th I made a plastic operation in order to cover a triangular spot, which had remained uncovered on account of cicatricial shrinkage and loss of bone substance. This wound healed by first intention, and the patient was discharged cured August 17th. A singular fact to consider is that, although the patient's injuries were of such a serious nature, he still was able to perform the journey from Lake Tahoe to the German Hospital all alone.

DR. W. S. THORNE inquired whether there was any change in the mentality. It was extraordinary what an amount of brain tissue could be lost without impairment of the mind. Twenty-four years ago he had assisted Dr. L. C. Lane in removing a large portion of the left parietal bone, and there was an immense amount of brain substance lost—as near as they could calculate, a small teacupful. The fracture was due to the explosion of a gun. The patient recovered in due time and there was no loss of mental capacity. This seems strange, as it puts at fault cerebral localization, unless the brain is a dual organ, each side acting independently of the other.

DR. T. F. RUMBOLD said he had noticed in watching the patient walking about the room, that he had a peculiarity in his gait, and inquired if Dr. Miller had observed it.

DR. DUDLEY TAIT asked if the epileptiform attack the patient had was localized or general.

DR. G. F. SHIELDS said that this case was interesting in another direction, as showing that there can be a loss of brain substance and no loss of motion. It reminded him of a case which came under his observation at the Polyclinic. A boy fell down six or seven stone stairs, on Thursday, and there was found to be a swelling over the parietal bone. On Friday he played at school. Saturday was taken to the Park and played around, Sunday was down about the water front in and out among the shipping, and on Monday was brought to the Polyclinic. On examination a fluctuating swelling was found over the parietal region, no other special symptom excepting a bilateral symmetrical nystagmus. Dr. Taylor examined the case and thought it was nothing serious. Six days after the receipt of the injury the swelling was incised and there escaped from $1\frac{1}{2}$ to 2 ounces of blood which had collected between the dura and skull; it escaped through a fracture which extended from the parietal to the mastoid process. The boy recovered. He thought it best to put such cases to bed for 3 or 4 days and watch them closely. It was truly remarkable the loss of brain substance that could occur without very serious consequences. He had seen in consultation the case of a boy who was shot clear through the parietal bone. There was loss of brain substance, but still the boy was not, apparently, very bad. He was comatose for a day or two, and finally died of septic processes.

DR. J. F. MORSE said he recollected two cases that had been under his care. One was a man who had been stabbed during a drunken brawl, on the right side of the forehead with a penknife. He came to the City and County Hospital 3 or 4 days afterwards complaining of headache. The wound was opened and a punctured wound of the skull was found; he operated and removed from the brain the point of the knife and a clot as large as a good sized marble. The wound was dressed and the patient put to bed. The patient had been drinking and was nervous; he was also the subject of valvular disease and albuminuria. On the second day he removed the bandage and tore the wound open; after this he had hemorrhage and died in a day or two. The second case came under his care at the German Hospital; patient said he had fallen down, and there was a wound over the right ear. He was put upon the table and the wound opened up when a stellate fracture of the squamous portion of the temporal bone was found. A piece the size of half the palm of a hand was removed and an extensive clot and a large sequestrum was found, together with a small bullet—32 calibre—completely flattened out. Patient did not know that he had been shot. A short time ago he shot and killed himself.

DR. THORNE thought it was always well to examine into every case. He remembered a case in which a man was struck by a beer glass over the head, after which he worked ten days, when some twitchings, epileptiform in character, developed. The wound was opened up and a stellate fracture was found and trephined. This was followed by 50 or 60 convulsions, but the man finally made a good recovery. In another case, that of a Cornish miner, who was a confirmed asthmatic—he had often seen him cyanosed and gasping for breath. This man shot himself above the ear, a probe passing in five inches; there were innumerable general convulsions, but the case finally ended in recovery. Since then he has had no asthma, and has gained 30 pounds. He is now driving a hack in San Jose.

DR. LUKE ROBINSON said some time ago he had occasion to examine into the statistics of London hospitals, and he found that in one of the largest, trephining had only been performed six times in two years. He thought it best to trephine as early as possible, but where there was a simple and not a dangerous fracture he questioned the propriety of operating. He asked Dr. Morse if he would trephine in a case of simple fracture. He recalled a case of intense hemiplegia following this operation, and the railroad company said it was due to the surgical procedure. He searched the statistics, as already stated and he believed it was only performed six times in two years at Guys. In young cases, and where there were no symptoms present, he would put them to bed and watch closely until marked symptoms occurred. Trephining was no doubt sometimes done when not needed.

DR. MORSE in reply to Dr. Robinson said he certainly would trephine in a case of simple fracture, as otherwise it was impossible to tell how badly the

inner table might be injured. In the case he had mentioned the sequestrum was shoved under the skull cap. Trephining is safe, and some claim necessary for diagnosis. No matter what the surgeon did, he would always be blamed in a lawsuit. He would act absolutely independent of any construction that might be put upon his treatment in court. In modern surgery trephining was not considered a grave operation. Ten or fifteen years ago it was considered to be a very important one, but now there is no danger if everything is done antiseptically.

DR. SHIELDS said the only indication of a fracture in the case he had mentioned was a spurt of blood, which, when followed up, led to the fracture.

DR. D. W. MONTGOMERY said that a few years ago at Bellevue, Dr. Horsley had five cases of depressed fracture and all of them ended fatally. He would certainly trephine in every case where he saw a fracture.

DR. THORNE remarked that F. Hamilton taught that in no injury of the skull should one trephine unless there are symptoms which demand it. The question of trephining is complicated by that of concussion. The following case being in point: A young man found unconscious, left arm and left side of the face paralyzed. He remained in a semi-comatose condition, but could indicate when he desired to pass urine or feces. The question of intoxication arose, the young man had been drinking, and had either been thrown or fallen from the horse, which he had been riding. An examination of the skull was made, but nothing was found: no contusion, no scratches, yet he had all the above symptoms, and his relatives were advised to wait, but the surgeons wanted to trephine. The patient remained in this condition for eight or ten days, and finally recovered. The rule probably was "better trephine too early than too late."

DR. MORSE: This was a case complicated by the symptoms of compression. Hamilton's theory applied to the cases he had mentioned would be the height of folly; if he had waited, both would have been past any surgical aid.

DR. ROBINSON inquired if Dr. Morse would trephine in every case of fracture.

DR. MORSE said he would trephine in any case where he could see a linear fracture. He thought it always best to investigate every case thoroughly, as there might be an extensive depression of the inner plate—probably not so absolute in young children.

DR. THORNE asked if children did not sometimes recover quickly from depression of the skull.

DR. MORSE replied that they did, but they often developed epilepsy afterward.

DR. HILDEBRANDT: The operation of trephining was formerly considered dangerous, but now we are getting along better in all our operations, and the danger from omission was five times greater than that of the operation itself.

DR. HUND said he believed that Dr. Morse was right; he had trephined twice under this rule. In one case, that of an 18-months child, who had a tack driven into her head three weeks previously, pus was evacuated, and a spicula of the inner table that had been driven into the dura mater.

DR. TAIT said he saw many good results occur from "radical" measures. In the case of a girl who received a bullet wound, penetrating the supraorbital ridge, the wound suppurated, and finally cicatrized and healed, but the bullet remained, and no bad symptoms followed, except an occasional headache. The balance turns in favor of the trephine. Of course there are differential symptoms in concussion, compression, and fracture, which should be thoroughly recognized. Taken all in all, one should make a good diagnosis.

DR. MILLER in replying said the patients had never shown any mental derangement. There had been, as stated, only one slight epileptiform attack during the washing of the wound. This was rapid and bilateral. There was in the case alluded to by Dr. Rumbold a loss in the supraorbital ridge, and there might have been some impairment of sight. He agreed with Dr. Morse that we must conclude trephining is best under any circumstances. There was no harm done, and it was better for the patient. There might be an extensive fracture with very little pain. The negro, whose case he had reported, was not in bed, but walked from the office to the operating room.

DR. D. W. MONTGOMERY said the disease was interesting because of the periodicity of its return. The attack, in Dr. Tait's case, always occurred dur-

ing the fall; and with other patients also, it has been observed to recur at some certain season. One cannot help comparing it to those periodical physiological exfoliations, such as the annual shedding of the horns of deer.

DR. D. S. TAIT read a paper entitled "Clinical Notes on a Case of Exfoliating Dermatitis (published at p. 115).

DR. W. S. THORNE said he had been connected for 20 years with one of the largest quicksilver mines in the country, and had seen a large number of mercurialized people, but none with this trouble. He doubted the relationship between cause and effect, and did not believe that mercury had anything to do with the case. He had never seen it; he had visited the quicksilver mines of Spain and Austria, and nothing of the kind existed there. He inquired whether the patient was profoundly mercurialized.

DR. TAIT, in reply to an inquiry, said this was the fifth year of the trouble. The last attack came on in September, and lasted for about five weeks. There is an exfoliation over the entire body, not simply the mucous membrane. The patient had only once been profoundly mercurialized, that was in 1889. Later on, when the patient was working on a ranch, the disease appeared.

SPECIAL CORRESPONDENCE.

BERLIN.

The Necessity of a Knowledge of the Language to Visiting Physicians.—Facilities for Instruction.—The Eye and Ear Clinics.—Operations Upon the Mastoid.—Prof. Hirschberg's Clinic.—His Method of Aseptic Operations. Unjust Criticisms by a Visitor.—Results of Asepsis.

A very common mistake which American physicians make in coming to Berlin is neglect to acquire a reasonably good knowledge of the language before leaving home. It seems to be a prevalent fallacy amongst us that German can be learned in a few weeks. That childlike credulity is dispelled after two or three months' struggle and many painful and futile attempts to make one's self understood. Every one who does not expect to spend a year or more here should bring a good speaking knowledge of the language with him or he will not succeed in making good use of his time. Berlin is often very disappointing to Americans for this very reason—they expect in some occult way to understand a difficult language almost at once.

Berlin differs from most other medical centres in having so few post-graduate classes. Few short private courses are given. Nearly all the courses begin at the first of each semester, and to become a student of the most desirable professor one must be present and apply previous to the opening of the semester. In many of the specialties there are exceptionally good opportunities for those who wish to see clinical work; but for those desiring more instruction Vienna possesses superior advantages. Wandering students find much less to attract them here than in the Austrian capital.

Most of my time so far has been spent in the eye clinics of Professors Schweigger and Hirschberg and the ear clinic of Prof. Lucae. Dr. Jansan, assistant to the latter professor, does an immense clinical practice. During the past ten days I have assisted him in four operations upon the mastoid. Besides these grave cases, one sees almost every variety of ear disease each week. During the past two years Dr. Jansan has operated upon the mastoid about two hundred and fifty times; and it is very instructive to observe his fearless and free chiseling into the mastoid and scraping out granulations and diseased bone. He makes quite a long external incision close to the ear, then denudes the bone of periosteum to the meatus, which, with the linea temporalis, are his landmarks for the bone incision. The bone is chiseled into, close to the bony meatus and extended in the direction of the osseous affection. Cases which gave little external evidence of deep trouble, showed, when opened, extensive bone disease. During the four weeks' vacation from the middle of March Dr. Jansan will take private students, but he has not previously done so.

The operations upon the eye which have interested me most were done by Prof. Hirschberg in his model operating room. Under the operator's painstaking care aseptic ophthalmic surgery is brought, it would seem to me, very near

to ideal perfection. His operating room contains no useless furniture. It is all simple so as to be easily cleansed. The floor is of tiles, the operating table and stands for holding instruments, etc., are made of iron and glass. The shelves in the instrument cases are also of glass. For each important operation he has separate instruments and also an individual brush for their cleansing. Previous to being used the instruments are first placed in alcohol, then boiled and placed on trays which have been bathed in bichloride solution. All solutions which are applied to the eyes are freshly prepared and boiled. Each patient has his individual bottle and dropper, all of which have been sterilized either by heat or bichloride solution. The cotton, bandages, and other dressings are thoroughly baked. Immediately before an operation the professor, his assistants, and spectators thoroughly wash and disinfect their hands, and put on large white aprons covering their clothes. The first time I was invited to be present I was asked to prepare myself in the same manner. Before being brought into the operating room the patient is given a bath and the face and eyes are thoroughly washed. Dr. Hirschberg aims at perfect asepsis—thus making every effort to prevent the presence of germs, instead of using strong germ destroying fluids, ointments, or balsams, upon the eyes.

Not long since some physician from Delaware after visiting his clinic criticised the professor's method by saying that everything was aseptic with the exception of the patient. If the visitor had inquired or observed he would readily have seen how unjust and untrue the criticism was. Many may doubt the necessity of such strict measures, but when the results are seen it cannot, I think, be denied that they are better than under the usual treatment. The cleanliness is certainly most desirable, and no doubt the day will come when less perfect surroundings and care will be considered bad surgery. Among the professor's last series of two hundred cataract extractions he has not had a single case of suppuration. In a letter only a very superficial outline of the system carried out in this model hospital can be given, but a description of the methods adopted has already been published and any one desiring to follow it out to the minute details should carefully read this article.

BERLIN, February 11, 1892.

WM. ELLERY BRIGGS.

REVIEWS AND NOTICES.

THE COSMOPOLITAN for March contains a large amount of interesting matter, amongst which we notice an article on the Cologne Cathedral, by Elizabeth Bisland, beautifully illustrated; and the Columbia World's Fair, by M. H. De Young, of San Francisco. In this number the *Cosmopolitan* commences a series of articles on aerial navigation, a problem that it has undertaken to solve.

J. B. FLINT & Co., of New York, have in press, to be ready early this year, "A System of Gynecology," with numerous illustrations based upon a translation from the French of Samuel Pozzi, complete in one volume, revised by C. M. Beebe, M.D. There is also in preparation "A System of Obstetrics," by Auvard. The same firm will shortly issue "A Condensed Complete Encyclopedia of Medicine and Surgery," complete in two volumes.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners, held February 2, 1892, the following physicians, having complied with the law and the regulations of this Board, were unanimously granted certificates to practise medicine and surgery in this State:

- Alida C. Avery, San Jose; New England Female Med. Coll., Mass., March 5, '62.
- John Brodie, Winters; McGill Univ., Montreal, Canada, March 28, '77.
- Henry C. Brown, San Jose; Rush Med. Coll., Ill., Feb. 15, '87.
- W. C. Brown, Los Angeles; Rush Med. Coll., Ill., Feb. 25, '61.
- George E. Bushnell, San Francisco; Cooper Med. Coll., Cal., Nov. 1, '84.
- James F. Christal, Santa Cruz; Cooper Med. Coll., Cal., Dec. 4, '91.

Gustave Paul Gehring, San Francisco; Jefferson Med. Coll., Pa., April 2, '92.
 M. A. Gilreath, Bakersfield; Univ. of Vanderbilt, Tenn., March 1, '91.
 John D. Hare, Fresno; Univ. of Michigan, June 26, '90.
 A. C. Hart, College City; Cooper Med. Coll., Cal., Dec. 4, '91.
 Joseph C. Hearne, San Diego; Jefferson Med. Coll., Pa., March 9, '72.
 Wm. E. Hopkins, San Francisco; Univ. of Virginia, July 3, '79; Univ. City of N. Y., Mar. 13, '80.
 F. N. Hunt, Riverside; Missouri Med. Coll., St. Louis, Mo., March 4, '84.
 Singleton Husted, San Jose; Coll. Phys. and Surgs., N. Y., Feb. 28, '79.
 George D. Keeler, Los Angeles; Toledo Med. Coll., Ohio, March 12, '89.
 Clarence W. Kellogg, Ventura; Cooper Med. Coll., Cal., Dec. 4, '91.
 John G. McKay, San Francisco; Med. Dept. Harvard Univ., Mass., March 10, '69.
 J. G. Neal, San Francisco; Kentucky School of Medicine, Ky., June 30, '90.
 Wilfred H. Sage, Mayfield; Med. Dept. Univ. Buffalo, N. Y., Feb. 25, '79.
 Franklin M. Seibert, Riverside; Med. Dept. Wooster Univ., Ohio, July 29, '91.
 Henry Clay Sill, Visalia; Pennsylvania Med. Coll. Pa., March 6, '51.
 E. J. C. Stelzner, San Francisco; State Board of Examiners, Dresden, Germany, July 2, '90.

CHAS. C. WADSWORTH, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific), from January 20, 1892, to February 20, 1892.

Capt. William R. Hall, Assistant Surgeon, upon the recommendation of the Medical Director of the Department, will proceed without delay to Benicia Barracks, Cal., for temporary duty at that post and Benicia Arsenal. Par. 1, S. O. 10, Dept. of California, Jan. 27, 1892.

Capt. William R. Hall, Assistant Surgeon, is relieved from temporary duty at Benicia Barracks, Cal., and will rejoin his station, Angel Island. Par. 2, S. O. 15, Dept. of California, Feb. 8, 1892.

Capt. Henry G. Burton, Assistant Surgeon, having been found by an army retiring board incapacitated for active service, is by direction of the President, retired from active service this date (Feb. 5, 1892), under the provision of Sec. 1251, Revised Statutes.

Capt. Henry G. Burton, Assistant Surgeon, having been found incapacitated for active service by an army retiring board, is granted leave of absence until further orders, on account of disability.

Lieut.-Col. Joseph P. Wright, Surgeon, is relieved from duty as Attending Surgeon, at the Military Prison, Fort Leavenworth, Kan., and will repair to San Francisco, Cal., and assume the duties of Acting Assistant Medical Purveyor, taking charge of the medical purveying depot at that place; and relieving Lieut.-Col. George M. Sternberg, Surgeon, who, upon being relieved, will proceed to Governor's Island, N. Y., and report in person to the Commanding General of the Dept. of the East, for duty as Attending Surgeon and Examiner of Recruits in New York City.

Capt. Louis Brechemin, Assistant Surgeon, will proceed without delay from the Presidio of San Francisco, Cal., to Vancouver Barracks, Wash., and report in person to the commanding officer of that post for temporary duty.

Official List of Changes in the Medical Corps U. S. Navy (Pacific Station) from January 20, 1891, to February 20, 1892.

Assistant Surgeon George H. Barber, from U. S. S. "Charleston," ordered home and two months' leave.

Past Assistant Surgeon Albert McCormick, to U. S. S. "Charleston."

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service (District of the Pacific) for the three weeks ended February 6, 1892.

Past Assistant Surgeon D. A. Carmichael, when relieved to proceed to Port Townsend, Wash., and assume command of service Jan. 23, 1892.

Past Assistant Surgeon A. H. Glennan, when relieved, at Port Townsend, to proceed to South Atlantic Quarantine and assume command of station Jan. 23, 1892.

Past Assistant Surgeon G. M. Magruder, relieved from duty at New Orleans, La., to assume command of service at Portland, Or., Jan. 23, 1892.

Assistant Surgeon G. T. Vaughan, when relieved at Portland, Or., to report to the Supervising Surgeon General. Jan. 20, 1892.

Surgeon Preston H. Bailhache, detailed as member board to select a site for a National Quarantine Station at or near Port Townsend, Wash., Feb. 6, 1892.

ITEMS.

Erratum.—In Dr. Abrams' paper, MEDICAL TIMES, Jan., '1892, p. 23, l. 35; for "7 per cent. of albumin," read 0.7 per cent.

Medical Association of Georgia.—The forty-third annual session of the Medical Association of Georgia will meet in Columbus, Ga., on April 20, 21, 22. The officers are: President, G. W. Mulligan, Washington; Vice-Presidents, James M. Hull, Augusta; Mark H. O'Daniel, Macon; Treasurer, E. C. Goodrich, Augusta; Secretary, Dan. H. Howell, Atlanta.